



WELCOME TO THE MUSICAL WORLD OF YAMAHA

WILLKOMMEN IN DER MUSIKALISCHEN WELT VON YAMAHA

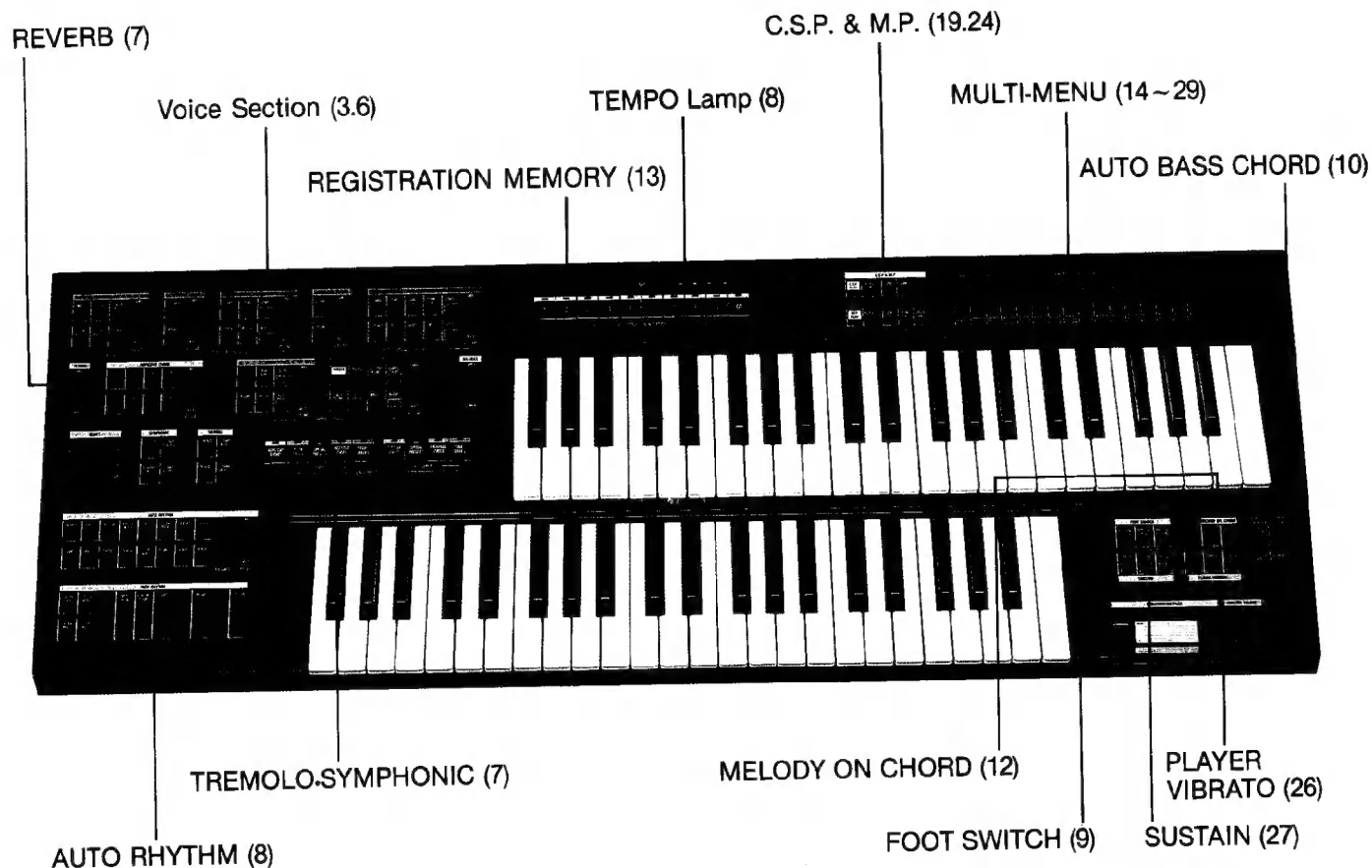
UNE ENTREE TRIOMPHALE DANS L'UNIVERS DE LA MUSIQUE

BIENVENIDO AL MUNDO MUSICAL DE YAMAHA

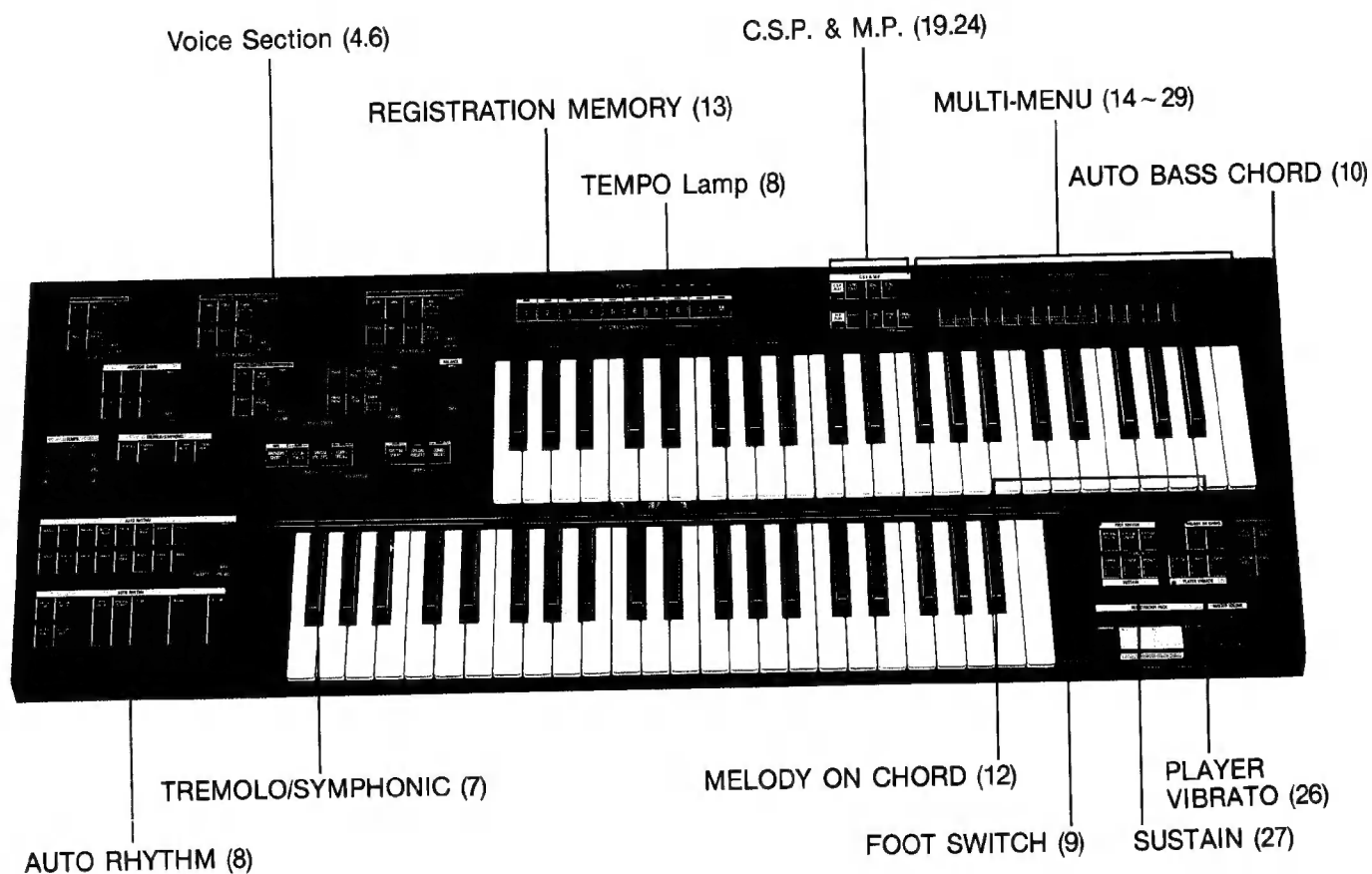
VÄLKOMMEN TILL YAMAHAS MUSIKALISKA VÄRLD

YAMAHA ELECTONE®

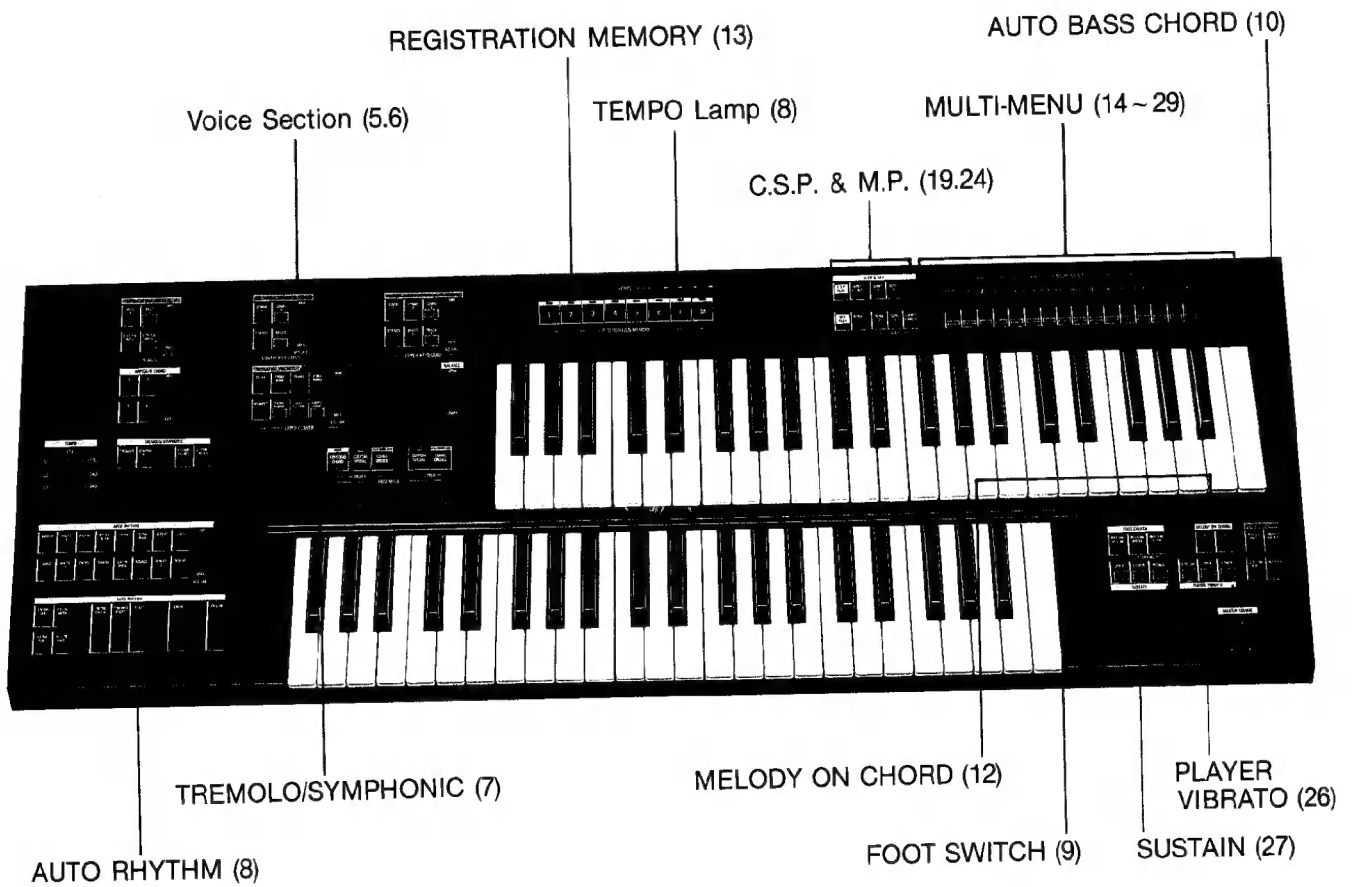
MC-600



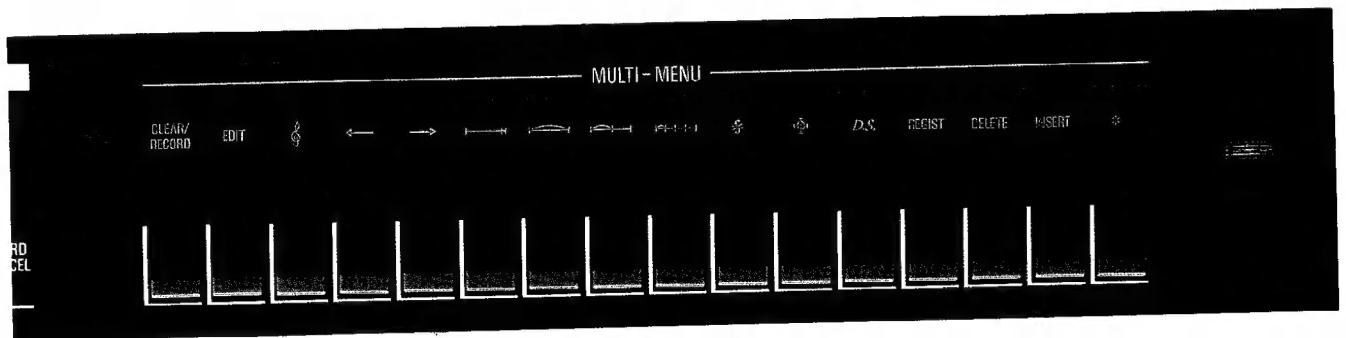
MC-400



MC-200



MULTI-MENU



- The numbers in brackets indicate the pages in this manual where you will find an explanation of these parts and features.
- Die in Klammern angegebenen Zahlen beziehen sich auf die Seiten in dieser Bedienungsanleitung, auf denen Sie die Erklärung der betreffenden Teile und Funktionen finden.
- On trouvera de plus amples renseignements sur ces commandes et caractéristiques en consultant les pages indiquées entre parenthèses.
- Los números entre corchetes indican las páginas de este manual en las que encontrará las explicaciones sobre estas partes y características.
- Siffrorna inom parenteserna hänvisar till de sidorna i denna instruktionsbok, där du hittar förklaringarna på delarna och deras funktioner.

► Introduction

Thank you for purchasing an MC-Series Yamaha Electone. The MC-Series is a totally new kind of Electone, utilizing the very latest in electronic technology, made possible by Yamaha's experience as a musical instrument manufacturer for nearly a century. Some of the many exciting features included are the Chord Sequence Programmer, which lets you preprogram the accompaniment (CHORDS/BASS) before you actually begin to play the melody, the Music Programmer, which enables you to record and play back your own performances on the Upper, Lower and Pedal keyboards independent of each other, and the Registration Memory System, which allows you to memorize voice, volume, and rhythm selection as well as all the necessary effects and have these settings available for instant access. Thanks to these outstanding features,

► Vorwort

Mit einem Instrument der Serie MC haben Sie eine Electone einer völlig neuen Generation erworben. Hier finden Sie die neuesten Spitzenleistungen in der Elektronik-Technologie, die nur durch die Erfahrung von Yamaha möglich geworden sind, die das Unternehmen als Musikinstrumentenhersteller in nahezu einem Jahrhundert sammeln konnte. Unter den vielen verblüffenden Ausstattungsmerkmalen finden Sie die Akkordfolgen-Programmiereinrichtung (Chord Sequence Programmer), mit dem Sie in der Lage sind, die Begleitung (CHORDS/BASS) vorzuprogrammieren, ehe Sie tatsächlich mit der Melodie beginnen. Ferner die Musik-Programmiereinrichtung (Music Programmer) mit dem Sie Ihren eigenen Spielvortrag auf dem oberen und unteren Manual sowie dem Pedal unabhängig voneinander aufnehmen und wieder-

► Avant-propos

Avant tout, merci pour avoir porté votre choix sur un Electone Yamaha de la série MC.

La série MC est une nouvelle race d'Electone issue en ligne droite des technologies les plus modernes en matière d'instrumentation électronique et d'une somme irremplaçable d'expérience accumulée par Yamaha depuis presque 100 ans. On relève sur ces instruments toute une gamme de caractéristiques exclusives, au nombre desquelles un programmeur de séquence d'accords qui offre la possibilité de programmer à l'avance des accompagnements (CHORD/BASS), un programmeur musical qui rend possible l'enregistrement et la lecture de séquences musicales sur les claviers supérieur et inférieur et sur le pédalier, indépendamment les uns des autres, un système à registre de mémoire pour la mise en mémoire des

► Introducción

Gracias por la adquisición de este Electone serie MC Yamaha.

La serie MC es un tipo completamente nuevo de Electones, que utilizan los últimos adelantos en tecnología electrónica, y que han sido posibles gracias a la experiencia de Yamaha como fabricante de instrumentos musicales adquirida durante aproximadamente un siglo. Algunas de las excitantes funciones incluidas son el Programador de secuencias de acordes que le permitirá programar el acompañamiento antes de comenzar a tocar una melodía, el Programador musical que le permitirá grabar y reproducir sus propias ejecuciones en los teclados superior, inferior, y de pedales independientemente entre sí, y el Sistema memorizador de registros con el que podrá memorizar la selección de voz, volumen, y ritmo, así como todos los efectos necesarios, y disponer estos ajustes para

► Introduktion

Tack för att Du valde en MC-serie Yamaha Electone.

MC-serien är en helt ny typ av Electone som utnyttjar det allra senaste inom elektronisk teknologi, och som blivit möjlig tack vare Yamahas erfarenheter som musikinstrumenttillverkare under nära ett sekel. Några av de många spännande finesser som ingår är Chord Sequence Programmer som möjliggör för Dig att på förhand programmera ackompanjemanget (ackord och bas) innan Du verkligen börjar spela melodin, en Music Programmer med vilken Du kan spela in och återge Ditt eget framförande på övre och nedre manual samt baspedaler helt oberoende av varandra, och ett Registration Memory system som tillåter Dig att memorera stämmor, volymer, rytmval och alla andra nödvändiga effekter och sedan kunna återkalla helt egna kompletta registreringar genom att bara trycka på en enda knapp.

your playing potential becomes almost limitless. In addition, the basic performance features such as sound authenticity, auto rhythm and auto accompaniment functions have also been greatly improved, providing you with an instrument which offers you whole new worlds of musical expression.

This manual has been designed to help you get acquainted with your MC-Series Electone and to make its fascinating possibilities easily within your reach. We recommend that you actually sit at your Electone while carefully reviewing these materials.

Thanks again for choosing Yamaha. Your fun has just begun!

*Before you begin, take a moment to read the Installation and Maintenance sections on page 31, which contain important information about your Electone.

geben können. Schließlich bleibt noch das Register-Speichersystem zu erwähnen, das es Ihnen gestattet, Stimme, Lautstärke, Rhythmus-Vorwahl und darüber hinaus alle erforderlichen Effekte zu speichern und Ihnen diese Einstellungen zum unmittelbaren Zugriff zur Verfügung stehen. Dank dieser vielseitigen Ausstattungsmerkmale gibt es für Ihre Spielmöglichkeiten praktisch keine Grenzen mehr. Zusätzlich hierzu sind auch die Grundfunktionen für eine musikalische Darbietung, wie z.B. Klangechtheit, automatischer Rhythmus und automatische Begleitfunktionen außerordentlich verbessert worden, so daß Sie hier ein Instrument erworben haben, mit dem Sie sich eine ganz neue Welt der musikalischen Ausdrucksmöglichkeiten erschließen.

*Ehe Sie zu spielen beginnen, nehmen Sie sich bitte die Zeit und lesen Sie die Abschnitte über Aufbau und Pflege auf Seite 31 durch, die wichtige Informationen über Ihre Electone enthalten.

voix, du volume et des sélections de rythme ainsi que tous les effets nécessaires, sans compter que tous ces réglages sont instantanément accessibles, autant de fonctions qui représentent un potentiel de reproduction sonore quasi-illimité.

De plus, les fonctions d'exécution de base telles que l'authenticité sonore, le rythme automatique et les fonctions d'accompagnement automatique ont été perfectionnées au point que l'on dispose, sur cet instrument, de ce qui se fait de mieux en matière d'instrumentation musicale électronique.

*Mais avant de commencer, veuillez consacrer quelques instants à la lecture des sections d'installation et d'entretien de la page 31 qui renferment un certain nombre de précautions très importantes ayant trait à l'Electone.

utilizarlos instantáneamente en cualquier momento. Gracias a estas notables funciones, su potencial como organista será prácticamente ilimitado.

Además, se han mejorado notablemente las características de las funciones de ejecución básicas tales como autenticidad de sonido, ritmo y acompañamiento automáticos, para ofrecerle un instrumento que pondrá al alcance de sus manos posibilidades fascinantes. Le recomendamos que se sienta en su Electone revisando cuidadosamente este manual.

Gracias de nuevo por haber elegido Yamaha, y ¡diviértase a placer con su Electone!

*Antes de comenzar, lea las secciones de Instalación y Mantenimiento de la página 31, que contienen información importante sobre su Electone.

Tack vare dessa enastående finesser kommer Din spelmöjligheter att bli praktiskt taget obegränsade. Dessutom har hela grunden för instrumentet som t.ex. naturtrogenheten hos ljuden, den automatiska rytmen och ackompanjemangets funktioner förbättrats enormt. Allt sammantaget ger Dig ett instrument som öppnar en helt ny värld av musikaliska uttrycksmöjligheter.

Denna instruktion har utformats för att Du ska bli bekant med Din MC-serie Electone och på ett enkelt sätt kunna utnyttja alla dess fascinerande möjligheter. Vi rekommenderar att Du verkligen sitter ner vid Din Electone medan Du noggrant går igenom detta material. Tack än en gång för att Du valde Yamaha. Det roliga för Dig har just börjat!

*Innan Du börjar bör Du ägna tid åt att läsa kapitlet Installation och skötsel på sid 31, vilket innehåller viktig information om Din Electone.

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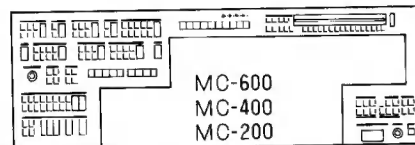
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I. The Basic Features of Your Electone

1. First, Let's Produce Some Sounds



POWER/MASTER VOLUME/EXPRESSION PEDAL

First of all, make sure that the plug is firmly inserted in the wall power outlet, then:

1 Turn the Electone on by pressing the POWER SWITCH.



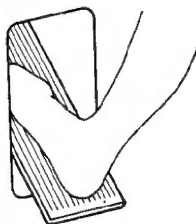
2 Set the MASTER VOLUME control.

This control lets you adjust the overall volume of your instrument. For now, place it in about a 12:00 position.



3 Place your right foot on the EXPRESSION PEDAL, which controls the overall volume while playing, for increased musical expression.

Push forward with your toes to make it louder, and back with your heel to make it softer.



4 Select a registration.

(The illustration shows the MC-600/400.)



This is the REGISTRATION MEMORY section which provides you with 8 complete registrations for all keyboards at the touch of a single button. Press any one of these buttons (numbered 1, 2, 3...). (See page 13 for additional details.)

5 Play some notes.

Now press some notes on the upper, lower and pedal keyboard. Before doing so, please switch off the Single Finger button on the right panel. You will hear some of the sounds available on your new Electone.



[Check for correct power voltage]

The correct voltage is indicated on the nameplate under the lower keyboard. Check to see if this voltage is the same as that which is used in your area. If any doubt exists, or if you should move, please consult your local Yamaha dealer for instructions.

[Memory when power is off]

At the time the power is turned off, the control panel setting (Registration) will be stored in memory. The same registration will automatically be recalled when the power is again turned on.

- The 8 REGISTRATION MEMORY buttons were programmed before shipment by using the first 8 sounds in the "REGISTRATION MENU" section of your Multi Menu. (See page 14 for details.)

[Number of notes able to be produced on each keyboard]

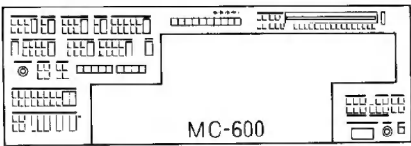
Upper/Lower keyboard (MC-600/MC-400): Up to 7 notes can be played simultaneously on each keyboard.

Upper/Lower keyboard (MC-200 only): Up to 6 notes can be played simultaneously on each keyboard.

Pedal keyboard and Custom Voices:

Normally, only one note can be played at a time. When more than two notes are played at the same time, the note farthest to the right has priority. (When the Custom Voices are used alone on the upper or lower keyboard, and more than one note is played, the last note pressed will be heard.)

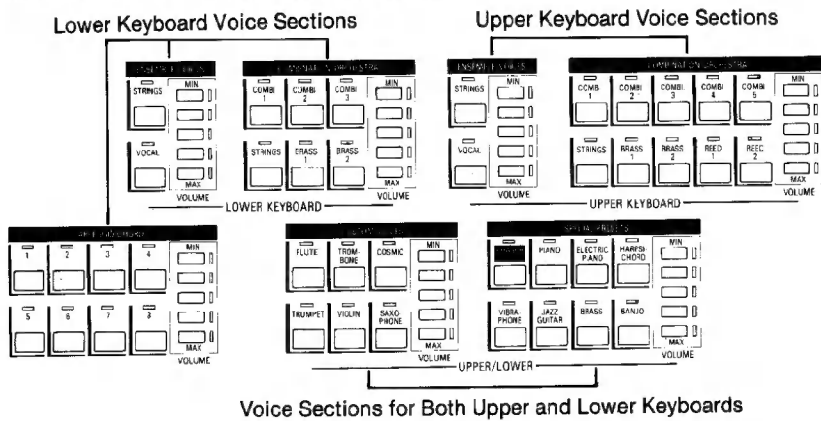
2. Now, Let's Create Some Registrations



Upper and Lower Keyboard Voices (MC-600)

The MC-600 has 2 voice sections for use with the upper keyboard, 3 voice sections for the lower keyboard and 2 voice sections which can be used on either the upper or the lower keyboard.

1 Choose one sound from each section.

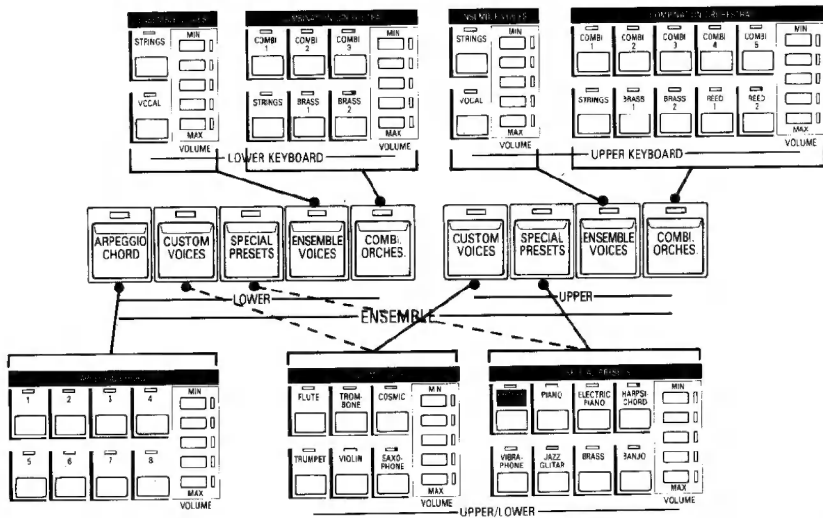


2 Set the volume.

Please set the volume to the desired level for each of these sections. Your Electone lets you select one of five volume levels—the top one (MIN) being the softest and the bottom one (MAX) being the loudest.



3 Press the desired ENSEMBLE buttons.



The Ensemble Section is your "Control Center" for upper and lower keyboard sounds. Referring to the illustration above, press the buttons which correspond to the voice sections you now want to use. It is possible to combine sections by pressing more than one button for each keyboard.

4 Play the upper and lower keyboards.

Experiment with the wide range of possibilities made available by merely changing to other Ensemble combinations.

[Characteristics of Each Voice Section]

COMBINATION/ORCHESTRA: This voice section consists of two groups of sounds. The Combination group provides a variety of organ sounds, while the Orchestra group recreates the major instrumental sections of an orchestra.

ENSEMBLE VOICES: Allows you to choose between the rich sound of a string ensemble and a human chorus.

SPECIAL PRESETS: This voice section contains some of the more percussive instrument sounds, including piano and jazz guitar.

CUSTOM VOICES: This section contains solo instruments such as flute, saxophone and trombone. These sounds are monophonic, which means that only one note may be played at any given time.

ARPEGGIO CHORD: This section offers rhythmic accompaniment (both chords and arpeggios) in synchronization with the rhythm. (See page 6.)

[Sounds Preset in Combination]

(Upper)

Combi. 1: Principal (Basic organ)

Combi. 2: Flute 8'

Combi. 3: Full organ

Combi. 4: Jazz organ 1

Combi. 5: Jazz organ 2

(Lower)

Combi. 1: Principal (Basic organ)

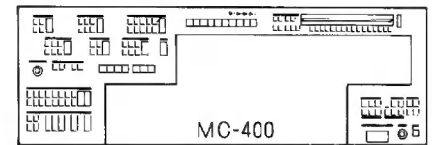
Combi. 2: Flute 8'

Combi. 3: Full organ

[PHASER]

This effect can be used only with the Special Presets. It provides a mildly "electronic" sound and adds another dimension to your performance.

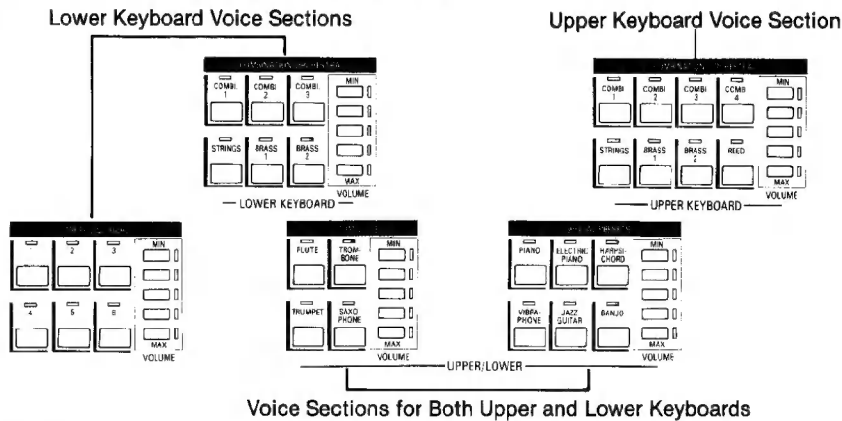
- Sounds from Voice Menus 1 + 2 can be transferred from the Multi Menu to any of the grey buttons in the voice sections. (See page 25 for details.)



Upper and Lower Keyboard Voices (MC-400)

The MC-400 has 1 voice section for use with the upper keyboard, 2 voice sections for the lower keyboard and 2 voice sections which can be used on either the upper or the lower keyboard.

1 Choose one sound from each section.

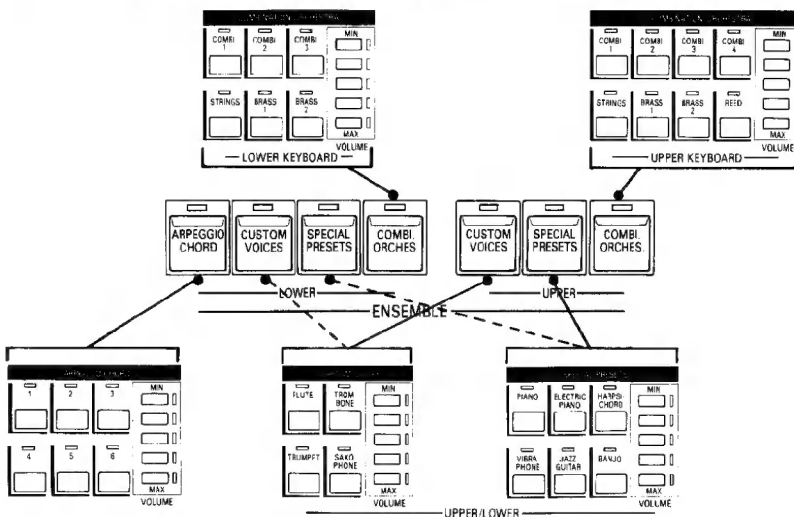


2 Set the volume.

Please set the volume to the desired level for each of these sections. Your Electone lets you select one of five volume levels—the top one (MIN) being the softest and the bottom one (MAX) being the loudest.



3 Press the desired ENSEMBLE buttons.



The Ensemble Section is your "Control Center" for the upper and lower keyboard sounds. Referring to the illustration above, press the buttons which correspond to the voice sections you now want to use. It is possible to combine sections by pressing more than one button for each keyboard.

4 Play the upper and lower keyboards.

Experiment with the wide range of possibilities made available by merely changing to other Ensemble combinations.

[Characteristics of Each Voice Section]

COMBINATION/ORCHESTRA: This voice section consists of two groups of sounds. The Combination group provides a variety of organ sounds, while the Orchestra group recreates the major instrumental sections of an orchestra.

SPECIAL PRESETS: This voice section contains some of the more percussive instrument sounds, including piano and jazz guitar.

CUSTOM VOICES: This section contains solo instruments such as flute, saxophone and trombone. These sounds are monophonic, which means that only one note may be played at any given time.

ARPEGGIO CHORD: This section offers rhythmic accompaniment (both chords and arpeggios) in synchronization with the rhythm. (See page 6.)

[Sounds Preset in Combination]

(Upper)

Combi. 1: Flute 8'

Combi. 2: Full organ

Combi. 3: Jazz organ 1

Combi. 4: Jazz organ 2

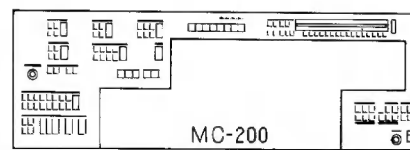
(Lower)

Combi. 1: Principal (Basic organ)

Combi. 2: Flute 8'

Combi. 3: Full organ

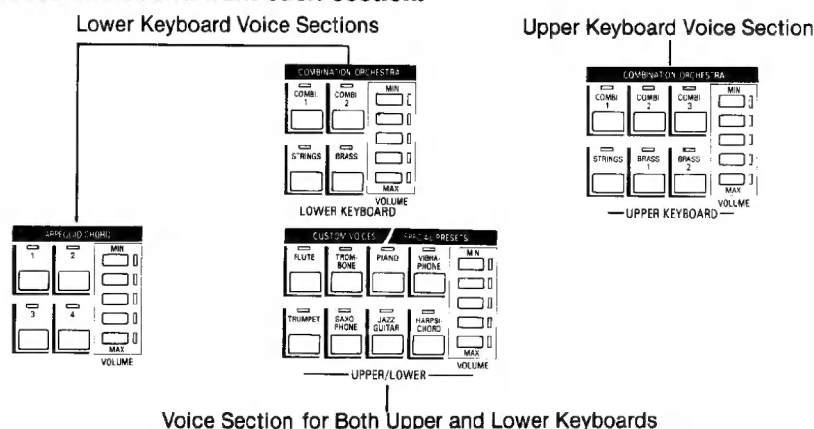
- Sounds from Voice Menus 1+2 can be transferred from the Multi Menu to any of the grey buttons in the voice sections. (See page 25 for details.)



Upper and Lower Keyboard Voices (MC-200)

The MC-200 has 1 voice section for use with the upper keyboard, 2 voice sections for the lower keyboard and 1 voice section which can be used on either the upper or the lower keyboard.

1 Choose one sound from each section.

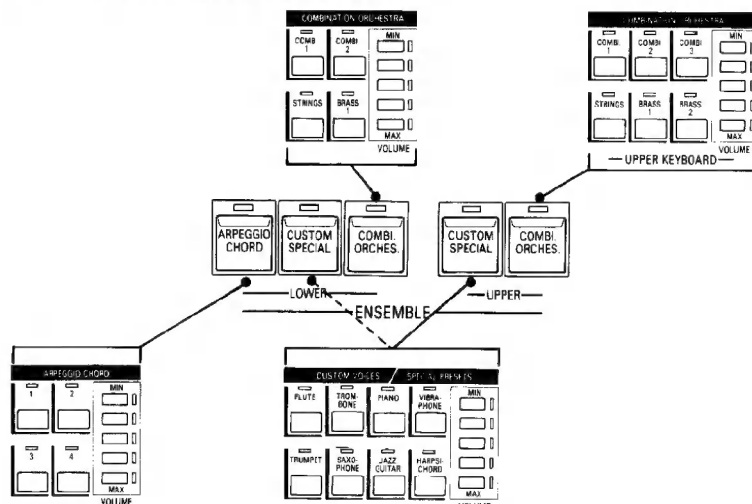


2 Set the volume.

Please set the volume to the desired level for each of these sections. Your Electone lets you select one of five volume levels—the top one (MIN) being the softest and the bottom one (MAX) being the loudest.



3 Press the desired ENSEMBLE buttons.



The Ensemble Section is your "Control Center" for upper and lower keyboard sounds. Referring to the illustration above, press the buttons which correspond to the voice sections you now want to use. It is possible to combine sections by pressing more than one button for each keyboard.

4 Play the upper and lower keyboards.

Experiment with the wide range of possibilities made available by merely changing to other Ensemble combinations.

[Characteristics of Each Voice Section]

COMBINATION/ORCHESTRA: This voice section consists of two groups of sounds. The Combination group provides a variety of organ sounds, while the Orchestra group recreates the major instrumental sections of an orchestra.

CUSTOM VOICES/SPECIAL PRESETS: This voice section contains a wide variety of instrument sounds. Custom Voices offer solo instruments such as Flute, Saxophone and Trombone that are monophonic, meaning that only one note may be played at any given time. Special Presets provide some of the more percussive instruments, including piano and jazz guitar.

ARPEGGIO CHORD: This section offers rhythmic accompaniment (both chords and arpeggios) in synchronization with the rhythm. (See page 6.)

[Sounds Preset in Combination]

(Upper)

Combi. 1: Flute 8'

Combi. 2: Full organ

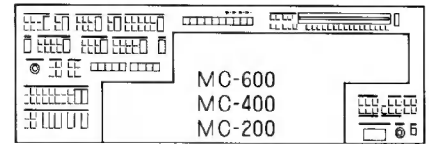
Combi. 3: Jazz organ

(Lower)

Combi. 1: Principal (Basic organ)

Combi. 2: Flute 8'

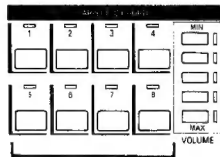
- Sounds from Voice Menus 1 + 2 can be transferred from the Multi Menu to any of the grey buttons in the voice sections. (See page 25 for details.)



ARPEGGIO CHORD

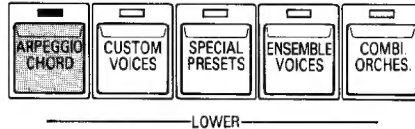
This feature provides harmonic background accompaniment that is synchronized with the rhythm, utilizing both chords and arpeggios.

1 Using ARPEGGIO CHORD.



Pattern selectors

(The illustration shows the MC-600)



LOWER

Choose one of the pattern selectors and set the desired volume. Do not forget to turn on the ARPEGGIO CHORD feature by pressing the appropriate button in the ENSEMBLE section (Lower).

2 Select an auto rhythm and start it.

Choose a rhythm pattern and set the desired volume and tempo. Now turn the auto rhythm on. (See page 8 for details.)

3 Press some keys on the lower keyboard.

You will now hear an "ARPEGGIO CHORD" pattern based on the notes you have pressed, played at the same tempo (speed) as the rhythm unit. Try some of the other patterns, as well as different rhythms, to hear some of the numerous possibilities.

[ARPEGGIO CHORD patterns]

The Arpeggio Chord patterns and the instruments used in each pattern will change according to the rhythm pattern selected to ensure that an appropriate accompaniment is obtained for each rhythm.

- Since this feature is synchronized with the rhythm, please be sure to start the auto rhythm in order to hear the Arpeggio Chords.
- Arpeggio Chord can also be used with the Auto Bass Chord system. The Automatic Bass pattern will change as you move from one Arpeggio Chord pattern to another. When the MEMORY button is pressed, the Arpeggio Chord accompaniment will continue even if you remove your fingers from the lower keyboard.

BALANCE

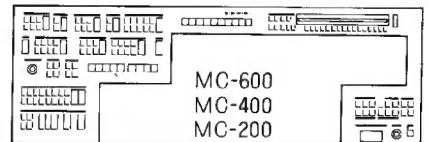
This control lets you adjust the balance between the volume of the upper and lower keyboard. Simply press the button that indicates which keyboard you wish to be louder.



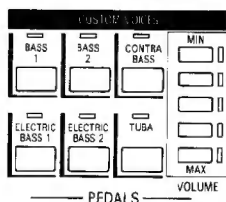
- This control, when set in this position, will provide a balance which is suitable for most situations.

Pedal Keyboard Voice Section

The pedal keyboard voice section gives you a variety of bass sounds. The pedal keyboard is monophonic, meaning that only one note may be played at any given time.

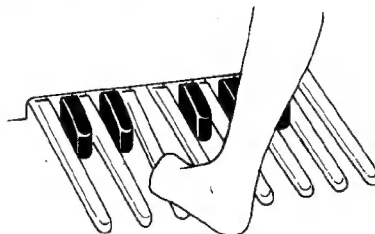


1 Select a bass sound and set the volume to the desired level.



(The illustration shows the MC-600)

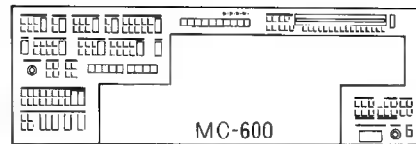
2 Play a pedal.



Try some of the other bass sounds in this section.

- If you use the Auto Bass Chord, Single Finger or Fingered Chord modes, you can obtain automatic bass accompaniment without playing the pedal keyboard. (See page 10.)
- Sounds from Voice Menus 1 and 2 can be transferred from the Multi Menu to either of the grey buttons in this voice section. (See page 25 for details.)

3. Using Effects for an Even Richer Sound



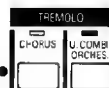
TREMOLO and SYMPHONIC (MC-600 only)

These effects add another dimension to the COMBINATION/ORCHESTRA section. Your MC-600 offers independent Tremolo and Symphonic effects for the Upper and Lower Keyboard at two speeds, fast or slow. Let's take a moment to try each of them.

1 Select a COMBINATION/ORCHESTRA voice for the upper keyboard.
(See page 3.)

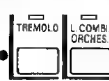
2 Press either Tremolo or Chorus and hold some notes on the Upper Keyboard.

Chorus simulates the sound of a rotating speaker system at slow speed.



This switch adds the effect to the upper keyboard.

Tremolo simulates the sound of a rotating speaker system at fast speed.



This switch adds the effect to the lower keyboard.

3 Press either Symphonic or Celeste and hold some notes on the Upper Keyboard.

Celeste produces a slow "electronic" animation.



This switch adds the effect to the upper keyboard.

Symphonic produces a fast "electronic" animation giving the impression that a large number of instruments are played together.



This switch adds the effect to the lower keyboard.

- When both Tremolo and Chorus selectors are turned off, it will seem as if the rotating speaker system has stopped. The spacy effect, however, is still present.

- Your Electone has been designed so that either Celeste or Symphonic will always be on.

- It is not possible to use ■ Tremolo effect (Tremolo or Chorus) and ■ Symphonic effect (Symphonic or Celeste) simultaneously on the same keyboard. However, these effects could be combined, for example, by using Tremolo on the upper keyboard and Symphonic on the lower keyboard, or vice versa.

- There are other effects designed to enhance your playing. See pages 26—27 for information regarding PLAYER VIBRATO and SUSTAIN.

REVERB (MC-600 only)

Reverb adds an "echo" effect to the sound of your Electone, giving a sound similar to that found in cathedrals and concert halls. We have provided five different degrees of Reverb, ranging from minimum to maximum.



- Reverb can only be added to the upper and lower keyboards. It will not affect the pedal keyboard or rhythm sounds.

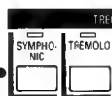
TREMOLO/SYMPHONIC (MC-400/MC-200)

These effects add another dimension to the Upper and Lower COMBINATION/ORCHESTRA sections.

1 Select a COMBINATION/ORCHESTRA voice for the upper keyboard.
(See page 4/5.)

2 Press either Tremolo or Symphonic and hold some notes on the upper keyboard.

SYMPHONIC produces an "electronic" animation that gives the impression that a large number of instruments are playing together.

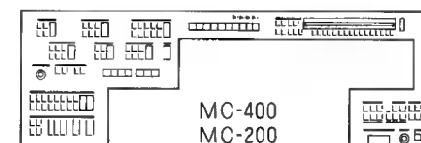


TREMOLO simulates the sound of a rotating speaker system at fast speed.



This switch adds the effect to the upper keyboard.

This switch adds the effect to the lower keyboard.

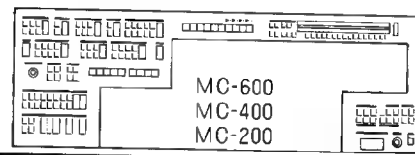


[CHORUS effect]

If neither the Tremolo nor Symphonic effects are on, a CHORUS effect will be produced that is essentially a slow tremolo.

- There are other effects designed to enhance your playing. See page 26—27 for information regarding PLAYER VIBRATO and SUSTAIN.

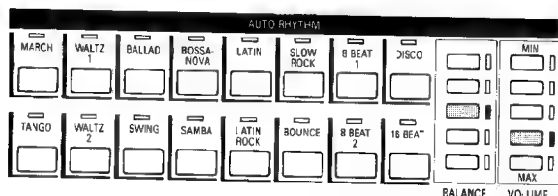
4. Adding Rhythm



AUTO RHYTHM

Gives you 16 different patterns using a variety of authentic percussion sounds.

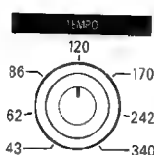
- 1 Select one of the rhythm patterns and set the desired volume level.



(The illustration shows the MC-600/MC-400)

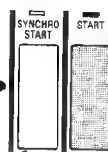
- 2 Adjust the tempo (speed) of the rhythm.

This knob is used to control the speed of the rhythm. The tempo will increase if you turn the knob clockwise and will decrease when you turn it counter-clockwise. (The numbers printed around the knob indicate the approximate number of beats per minute.)



- 3 Turn the rhythm on.

If you turn this button ON, the rhythm will wait and start with you when you play a note on the lower (or pedal) keyboard.



When this button is turned ON, the rhythm will start immediately.

Once the rhythm has started, pressing one of these buttons again will stop the rhythm.

[BALANCE (MC-600/MC-400)]

This control allows you to adjust the balance of the different percussion instruments. The middle position approximates levels found in live performance. Moving above the middle position will emphasize cymbals and other high pitched instruments. Moving below the middle position will emphasize the drums.

[TEMPO lamps]



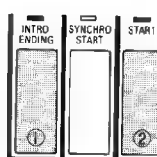
These lamps light up successively from left to right to indicate the tempo of the selected rhythm.

The extreme left red lamp indicates the first beat or down beat of a measure. These rhythm patterns have been designed in two measure segments. All four lamps will be illuminated on the first beat of each segment. When Synchro Start is used, the extreme left lamp will flash, indicating the exact tempo (in quarter notes) until the rhythm is started.

INTRO/ENDING

- 1 Press the INTRO/ENDING switch and then press the start switch.

You will now hear a one measure rhythm introduction.



- 2 When you are almost finished with a song, press the INTRO/ENDING switch.

At the moment this switch is pressed, an ending pattern (two measures maximum) is played. As soon as the ending pattern is completed, the rhythm will stop automatically.



[ENDING VARIATION]



This feature offers you an alternative ending pattern.

- Once the rhythm has been stopped by the foot switch, an intro can be added by turning on the INTRO/ENDING switch. When the rhythm is re-activated, you will hear the intro pattern.

EXTRA PERCUSSION

This feature will add additional percussion sounds to the normal rhythm patterns.



- Some of the instruments added in Extra percussion are hand clap, tambourine and cow bell, and vary from rhythm to rhythm.

FILL IN

1 Choose a Fill In pattern.

FILL IN provides a variation to the basic rhythm pattern. Referring to the table [FILL IN patterns] on the right, select one of these 4 patterns and start the rhythm.







2 Press the FILL IN switch when you want to add this feature.

At the time you press the switch, the selected Fill In pattern will play until the end of that measure, and the rhythm will automatically return to the original pattern at the start of the next measure.



[Fill In Patterns]

1)		All rhythm patterns change.
2)		Variation pattern of 1).
3)		The basic rhythm pattern does not change. Instead, a new pattern is added.
4)		Variation pattern of 3).

- Should you desire a longer FILL IN pattern, hold the FILL IN button.
- If you press the FILL IN button before starting the rhythm, the Fill In pattern will act as an intro.

BREAK

If the rhythm is on and this button is pressed, the rhythm will temporarily "stop" until that measure is completed and then will begin again at the start of the next measure.



- Should you desire a longer BREAK, hold the break button.
- If you desire less than one measure of BREAK, press this button once to stop the rhythm and press again to re-start it.
- If the BREAK button is on before the rhythm is started, you will obtain a "silent" intro (with no rhythm sounds).

FOOT SWITCH

1 These selectors allow you to use the Foot Switch to perform three different functions.

This will allow you to add a Fill In pattern with the foot switch.



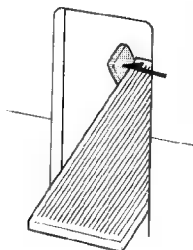
This allows you to stop (and re-start) the rhythm with the foot switch.

This allows you to insert a Break (rhythm stops temporarily) with the Foot switch and then re-start it.

Press one of these buttons and start the rhythm.

2 Move the Foot Switch to the left.

At the time the Foot Switch is moved, the function selected in (1) will be immediately performed.



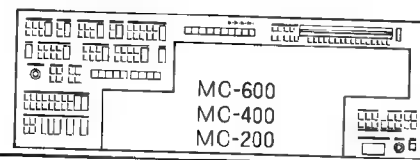
[ENDING control]



If both the RHYTHM BREAK and RHYTHM STOP buttons are on, and the foot switch is moved to the left, you will obtain an ending pattern and then the rhythm will stop.

- When RHYTHM STOP is used to stop the rhythm, the foot switch can also be used to re-start it again. The lamp above the STOP button will flash until the rhythm is re-activated.

5. Having Fun With Automatic Accompaniment



AUTO BASS CHORD

This function automatically produces chord and bass accompaniment. There are three different ways that you can use this feature, and we're sure that you'll find one just right for you.

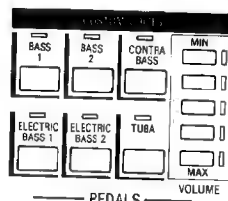
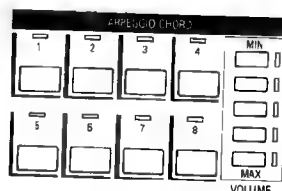
SINGLE FINGER

This feature allows you to obtain many different chords (and bass) by using just one finger.

- 1 Press the button labeled **SINGLE FINGER**.



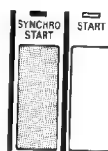
(The illustration shows the MC-600.)



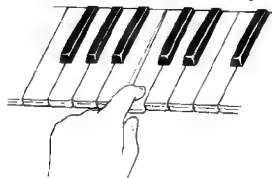
(The illustration shows the MC-600.)

- 4 Select a rhythm. (See page 8.)

Once you've chosen a rhythm pattern, adjust the tempo to a speed comfortable for you. Then set your desired volume level and turn on **SYNCHRO START**.



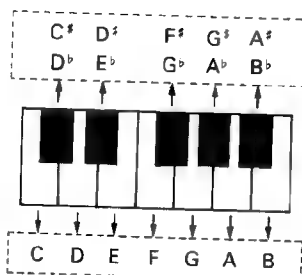
- 5 Hold a key on the lower keyboard.



You will now hear a major chord and bass accompaniment in synchronization with the rhythm.

The note you have played is called the "root". A chord derives its name from its root such as C major, F major, etc.

[Relationship between the lower keyboard notes and corresponding major chords]



[Let's try playing other chords!]

Minor chords: Simultaneously press the root (name) as well as any black key to the left of it.

(Example: Am)



Seventh chords: Simultaneously press the root (name) as well as any white key to the left of it.

(Example: G7)



Minor seventh chords: Simultaneously press the root (name) as well as any black key and any white key to the left of it.

(Example: Gm7)



- When you change Arpeggio Chord patterns, the bass pattern will automatically be changed.
- With Single Finger, the chord produced will sound in the same octave regardless of where it is played on the lower keyboard.
- When you want to change chords, please lift your finger from the lower keyboard for a moment before pressing the next key.
- When using Single Finger, Custom Voices cannot be played on the lower keyboard.

MEMORY

This feature allows the chord and bass accompaniment to continue even after you have lifted your fingers from the lower keyboard.



- Memory is linked with the auto rhythm and therefore will operate only if the rhythm is on (whether or not Auto Bass Chord is in use).

FINGERED CHORD

This feature permits you to play a variety of chords and will automatically provide the proper bass note.

1 Press the button labeled FINGERED CHORD.



2 Select an Arpeggio Chord pattern and your desired volume level. Be sure to turn on Arpeggio Chord in the Ensemble section. (See page 6.)

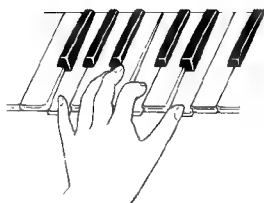
You can also add other lower keyboard voices to your accompaniment.

3 Select a pedal sound and your desired volume level. (See page 6.)

4 Select a rhythm. (See page 8.)

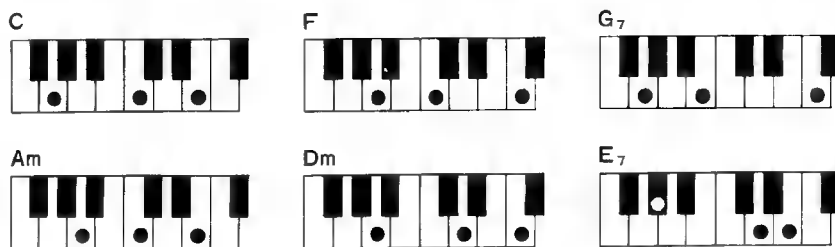
Once you've chosen a rhythm pattern, adjust the tempo to a comfortable speed and volume. If you use SYNCHRO START, the automatic accompaniment and rhythm will start when you play a chord on the lower keyboard.

5 Hold chord on the lower keyboard.



You will now hear a chord and bass accompaniment in synchronization with the rhythm. The chord you play forms the basis for the automatic accompaniment. You can also add Memory, if you like.

[Examples of Fingered Chords]



With Fingered Chord, a variety of other chords becomes available to you, above and beyond the four basic types obtainable with Single Finger.

Your Electone will automatically play the proper bass accompaniment to whatever chord you play.

- When Auto Bass Chord is used without the auto rhythm, your Electone will still provide the chords and bass, but the background will be stationary (not "animated").

Note: Arpeggio Chords will not work without rhythm. (See page 6.)

- The chords available in the Fingered Chord mode are the following: C, Cm, C7, Cm7, Cmaj7, Cdim, Caug, Caug7, Csus4, C7sus4, C6, Cm7-5, C-5, C7-5.

[CUSTOM A.B.C.]

Custom A.B.C. allows you to play a chord and pedal, and it will automatically create accompaniment patterns for you!

1) Press the button labeled CUSTOM A.B.C.



- 2) Choose instruments for the lower keyboard (including Arpeggio Chord if you like) and the pedal keyboard. Set all volumes to the level of your choice.

3) Select a rhythm.

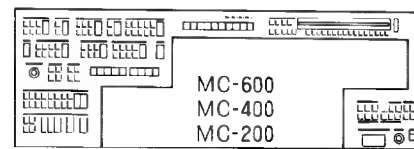
- 4) Play a chord on the lower keyboard and press one note on the pedal keyboard.

You will now hear chord and bass accompaniment in synchronization with the rhythm. Since the note pressed on the pedal keyboard can be any note (i.e., it does not have to be the "root" of the chord played on the lower keyboard), more sophisticated automatic accompaniments become available to you.

- When using Custom A.B.C., the MEMORY button will be used to memorize only the bass accompaniment.

- When using the pedals to play notes that are not part of the chord while using Custom A.B.C., select the upper row of Arpeggio Chord buttons.

6. Harmonizing the Melody



MELODY ON CHORD

With this function, single note melodies are transformed into beautiful harmonies automatically, enhancing your playing even further.

1 Press one of the MELODY ON CHORD buttons.

This will automatically add two notes to your melody.



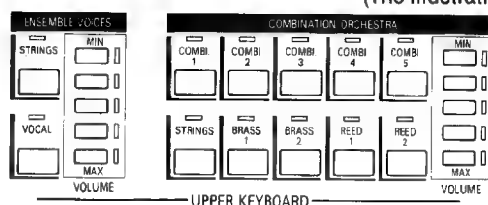
This will automatically add three notes to your melody.

2 Select an instrument to play the melody. (See pages 3, 4 and 5.)

Select the sound you want to perform your melody from among the voices available on the upper keyboard. Be sure to turn on the appropriate section in the Ensemble section, and to set all volume levels necessary.

3 Select your Harmony voices.

(The illustration shows the MC-600.)



Select which voices you wish to play the automatically added harmony from the COMBINATION/ORCHESTRA section. (ENSEMBLE VOICES may also be used on the MC-600 only.) Set the Volume level and be sure that these sections are turned on in the Ensemble section.

4 Select a voice for the lower keyboard. (See pages 3, 4 and 5.)

Once you've chosen one, remember to set your volume level and turn the section on in the Ensemble section.

5 Play a chord on the lower keyboard and the melody on the upper keyboard.

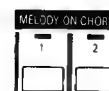
Harmonies will be automatically added to the melody, and your playing will sound more professional than ever!



[Use this feature with Auto Bass Chord too!]

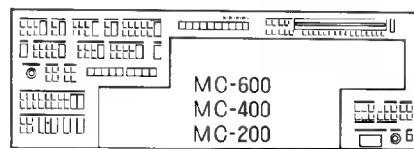
MELODY ON CHORD 1 and 2 can also be used with A.B.C. For example, if you use Single Finger, the chords automatically produced (by one finger) will be added as harmonies to the melody. If Memory and Auto Rhythm are in use, the harmonies will continue even after you have lifted your fingers from the lower keyboard.

- If MELODY ON CHORD buttons 1 and 2 are used simultaneously, you will obtain a three note harmony that is somewhat reminiscent of "open harmony".



- The automatically added harmony sound is derived from chords played on the lower keyboard. Therefore, no harmony will result when you play only the upper keyboard.
- When a melody is played on the lower range of the upper keyboard, harmony sounds will sometimes not be produced.

7. Memorizing Your Favorite Registrations



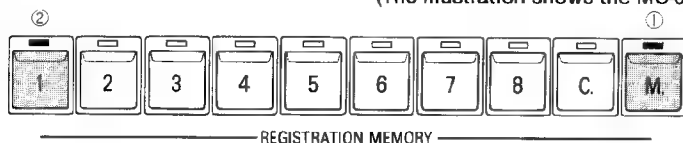
REGISTRATION MEMORY

This feature lets you store some of your favorite sounds in memory and have them conveniently accessible at the touch of a button.

How to Memorize a Registration

- 1 By using the control panel, set up your desired registration.
- 2 While pressing the red M. (Memory) button, press the numbered button (1,2,3,...) where you wish to store the sound.

(The illustration shows the MC-600/MC-400.)



The lamp above the numbered button you pressed will flash briefly, indicating that this registration has been memorized here. Store your other favorite registrations in the same way, utilizing the remaining numbered buttons.

- Registration Memory will not affect the following: Auto Rhythm (Intro/Ending, Synchro Start, Start, Break, Fill-in), Master Volume and some Multi Menu functions (like Transposition/Pitch, C.S.P. and M.P.).
- When a registration is stored in one of the numbered buttons, the previous contents of that respective memory are automatically erased.
- The data stored in Registration Memory will be retained for at least a week, even when the power is turned off. However, when using C.S.P. and M.P., this data will be erased. If you don't want to erase the data, transfer it to the Registration Pack (MC-600/MC-400) or to a cassette tape (all models). (See pages 28 and 29 for details.)

How to Recall a Registration From Memory

- 1 Press one of the numbered buttons.

(The illustration shows the MC-600/MC-400)



As soon as a numbered button is pressed, the registration that is in memory will instantly be set up on the control panel.

- 2 Additional registrations can be recalled by pressing the appropriate numbered buttons.

(The illustration shows MC-600/MC-400)



Whenever you press a different numbered button, the control panel setting will instantly change. You can easily see what settings have been memorized.

[Altering ■ Registration]

Any registration may be altered to any extent by simply changing the desired controls. Even if you have changed the control panel settings, the memorized registration will not be affected and will remain as it was programmed. If you wish this "altered" registration to be stored in memory, simply hold M. (Memory) button, and press the numbered button (1, 2, 3,...) where you wish to store it.

[CANCEL]



Pressing this control will return you to the registration that existed just prior to the use of the Registration Memory buttons.

II. What Multi Menu Can Do For You

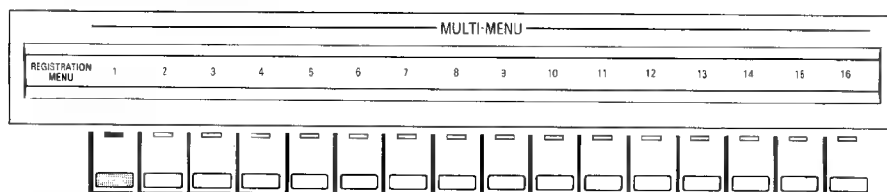
1. You Can Recall 16 Different Registrations

REGISTRATION MENU	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
----------------------	---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----

REGISTRATION MENU

This menu offers 16 preprogrammed registrations that can be used directly from the Multi Menu or stored in the Registration Memory Section, all available at the touch of a button.

1 Press one of these buttons.....



That registration will now be set up on the control panel (including voices on each keyboard, volumes, rhythm selection, effects and A.B.C.).

2 ...and you're ready to play!

Start the auto rhythm, and start playing.
Take a few moments to listen to the remaining registrations.



- The Registration Menu not only uses the sounds normally available on the control panel, but in some cases, the "grey" buttons that have been changed to other sounds from the Voice Menu (see page 25).

- When using the Registration Menu, any registration may be altered to any extent by simply changing the selected controls. In fact, you may want to store the "altered" Registration as new registrations in the Registration Memory.

- If the power is turned off for a long period of time, the sounds stored in the Registration Memory Section will be automatically replaced by the first eight sounds from the Registration Menu. The previous registrations will be erased.

[The preset sounds]

	Sound	Rhythm
1	March/Polka	MARCH
2	Pipe organ	(8 BEAT 1)
3	Theater organ	MARCH
4	Jazz organ	BALLAD
5	Jazz combo 1	SWING
6	Jazz combo 2	BOSSANOVA
7	Big band 1	SWING
8	Big band 2	BALLAD
9	Country	MARCH
10	String ensemble	8 BEAT 1
11	Pops ensemble 1	8 BEAT 1
12	Pops ensemble 2	LATIN ROCK
13	Pops ensemble 3	SAMBA
14	Fusion sound 1	16 BEAT
15	Fusion sound 2	DISCO
16	Fusion sound 3	BOUNCE

2. Programming the Accompaniment



CHORD SEQUENCE PROGRAMMER

This feature allows you to easily memorize chord progressions as well as registrations one at a time by simply pressing certain buttons.

[Quick Overview of the Operation Procedure]

How to Record a Sequence (CLEAR/RECORD)

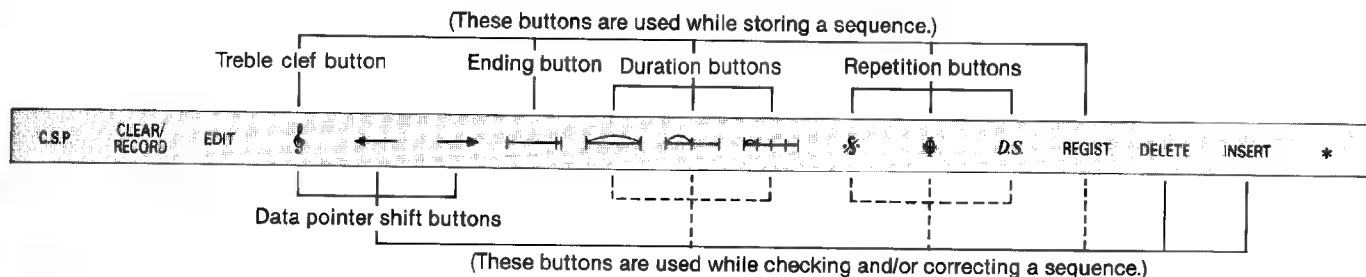
- 1) Set the control panel to the desired registration.
- 2) Press the CLEAR/RECORD button.
- 3) While the SONG lamps are flashing, press one of them.
- 4) While playing the first chord on the lower keyboard, press a duration button. You will hear a beep to confirm that the C.S.P. has memorized this chord duration. Continue programming the remaining chords in the same manner.
- 5) Press a repetition button if necessary.
- 6) To change the registration, simply set the new registration and press the REGIST. button.
- 7) When programming is completed, hold the treble clef button and press the ending button.
- 8) Turn the CLEAR/RECORD button off.
(Before turning off the Record feature, you may want to check your sequence (chords + registrations) and to make any corrections that you feel are necessary.)

Making Changes/Corrections in the Sequence (EDIT)

- 1) Press the EDIT button and, while the SONG lamps are flashing, select which SONG you wish to EDIT. (EDIT lamp is on.)
- 2) Check each item one at a time using the data pointer shift buttons. You may prefer to check the sequence, while the rhythm is on.
- 3) If you detect any errors, you can correct them in the following way. Editing must be done without rhythm.
 - Replace: You can replace an incorrect chord by programming the proper one.
 - Delete: Press the DELETE button if you wish to remove a chord from the sequence.
 - Insert: To insert a chord, press INSERT and then program the chord you wish. Insert must be pressed each time you wish to add a chord.
- 4) Turn off the EDIT function.

How to Play Back a Sequence (PLAY)

- 1) Turn on the C.S.P. PLAY button, and while the SONG lamps are flashing, select the song you wish to hear.
- 2) At this point, you may wish to use INTRO.COUNT, REPEAT or CHORD CANCEL. (See page 19 for details.)
- 3) Start playback by turning on the auto rhythm.
- 4) If you wish, you can play the melody while the accompaniment is being played back.



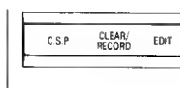
How to Record a Sequence (CLEAR/RECORD)

1 Set the control panel to the desired registration.

If you wish to change registrations during programming, be sure to previously store all Registrations in the Registration Memory.

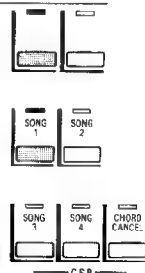
2 Press the CLEAR/RECORD button.

The four SONG buttons will start to flash.

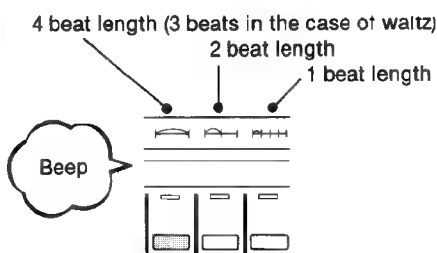
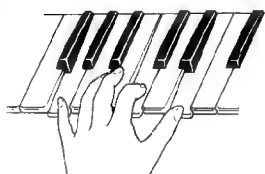


3 Select one of the SONG buttons.

While these buttons are flashing, press one of them. The corresponding lamp for the song you have selected and the Clear/Record lamp will stay illuminated.



4 While playing the first chord, press a duration button.



If you wish, you can use the SINGLE FINGER feature of the Auto Bass Chord section, thereby enabling you to memorize the chords by using a single finger. (See page 10 for details.)

When a duration button is pressed, you will hear a "beep", indicating that the chord has been stored in memory. Continue programming the remaining chords in the same manner.

5 Press a repetition button, if necessary.

For details on how to use these buttons, please refer to the corresponding section on the right.

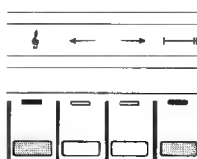


6 If you wish to change registrations at some point while programming, press the appropriate numbered button in the Registration Memory Section and then press the REGIST. button.



From this point on, the new registration will be used. If you wish to add a drums, Break, Fill In or Intro/Ending pattern at any point, simply hold the appropriate button and press the REGIST. button.

7 When you have completed the chord sequence, end the program by holding the treble clef button and press the ending button.



8 Turn the CLEAR/RECORD button off.

Before turning off the Clear/Record feature, you may want to check what you have programmed and make any corrections that you feel are necessary. (See page 18 for details on how to EDIT.)

- The registration on the control panel, as well as the sounds stored in the Registration Memory buttons, are immediately memorized by the C.S.P. when the CLEAR/RECORD button is pressed.

[Memory Capacity]

Each of the SONG buttons can store up to about 160 events such as chords, repetition symbols, etc., in its memory. When this memory is completely full, a warning sound (3 beeps) will be heard.

[No-Chord]

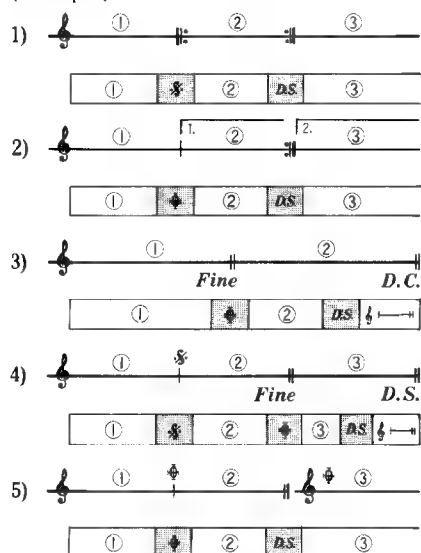
If you wish a measure without Chords, simply press a duration button without playing any notes on the lower keyboard.

IMPORTANT: After you have programmed an auto rhythm Intro, please be sure to memorize one no-chord measure. Also, be sure to memorize two no-chord measures after you have programmed an Ending.

[How to Use the Repetition Symbol Buttons]

When the symbols (S), (DS) or (D) are used in your music, press the corresponding repetition button while programming where these symbols appear in that music. When other repetition symbols appear, try to use one of these three symbols which most closely applies.

(Example)



- Even if you don't use the ending symbol, it will automatically be added at the end of a SONG when CLEAR/RECORD is turned off.
- It is not possible to consecutively memorize different registrations. If you made a mistake during registration, press the (←) button and then enter the correct registration.

C

- G7** 

C7 

- F** 

Fm 

American Folk Song

3)

BREAK or INTRO.	REGIST.			C		C	
--------------------	---------	--	--	---	--	---	--

[illegible]

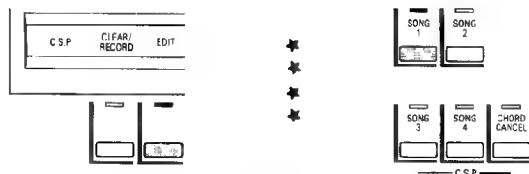
2. **G7** **C**

The musical notation shows a treble clef with a key signature of one flat (B-flat). The melody consists of the following notes: G4 (quarter), G4 (quarter), A4 (quarter), B4 (quarter), C5 (half), and a final whole note. The first ending is marked with a bracket and a repeat sign. The second ending is marked with a bracket and a repeat sign. The key signature is indicated by a flat symbol on the B line.

- 17

Making Changes/Corrections in the Sequence (EDIT)

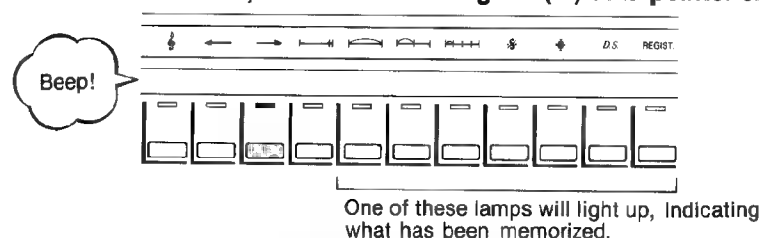
- 1 Press the EDIT button, and while the SONG lamps are flashing, select one of them.



The registration memorized for the beginning of the SONG is immediately set up on the control panel, and the first memorized chord will be heard. One of the duration buttons will also be illuminated.

(If a repetition button has been memorized at the beginning, that button will be illuminated.)

- 2 Check each item, one at a time using the (→) data pointer shift button.



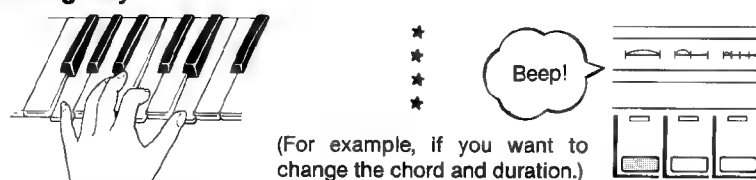
Every time the (→) button is pressed, the data pointer will advance to the next item. The information stored at each item is indicated by sounds and lamps in the following manner:

Chords: The memorized chord will be heard and the corresponding duration button will light up.

Repetition symbols: If a repetition button was used, the corresponding button will light up.

Altered registration: If a registration change was made, the control panel lights will change to the new registration and the REGIST. button will light up.

- 3 If you detect any errors or wish to make any changes, make them in the following way.



When making Changes/Corrections, leave the data pointer at the point you wish to make the change and do the following:

Chord correction: While playing the correct chord, press a duration button.

Duration correction: While playing the same chord, press the correct duration button.

Correction of repetition symbols: Press the correct repetition symbol button.

Registration correction: Set the control panel to the correct Registration or press the correct Registration Memory button. Now press the REGIST. button.

You can also delete old data and insert new data. (See the sections [DELETE] and [INSERT] on the right.)

- 4 Turn the EDIT button off.

[Various ways of using the data pointer shift buttons]

There are four different ways you can use the data pointer. They are shown in the following table.

→	Advances to the next item (one at a time).
←	Moves back to the preceding item (one at a time).
→	Immediately advances to the last item in the sequence.
←	Immediately moves back to the first item in the sequence.

[Checking and correction while using CLEAR/RECORD]

Before turning CLEAR/RECORD off, you can check and correct the memorized sequence in the same way as you do with the EDIT function. In this case, first press (←) (to get to the first item in the sequence) and then advance the data pointer one item at a time with the (→) button. You can also use the (←) button to check each item while moving back the data pointer one item at a time.

When you want to check or correct items after the CLEAR/RECORD button has been turned off, be sure to turn on the EDIT function.

IMPORTANT! If you were to turn on the CLEAR/RECORD button again, all of the memorized information would be erased.

[Checking with the rhythm on]

If you start the auto rhythm during EDIT (or RECORD), the memorized accompaniment will begin as it does when C.S.P. PLAY is used. (However, A.B.C., Arpeggio Chord and repetition symbols will be ignored.) It is possible to stop the auto rhythm at any time during playback to correct any errors found.

[DELETE]

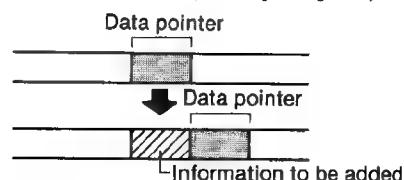
DELETE

Pressing this button causes the information indicated at the time to be automatically erased (deleted).

[INSERT]

INSERT

This button allows you to add new information. Place the data pointer where you wish to make your new entry, push the INSERT button (the lamp will illuminate), and then memorize the additional information (the lamp will go out).

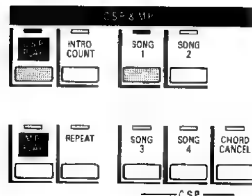


- If the data pointer is at the very beginning of a song, you can change the beginning registration by changing to your new registration and then pressing the REGIST. button.

How to Play back a Sequence (C.S.P. PLAY)

- 1 Turn on the C.S.P. PLAY button and select one of the SONG buttons.

The registration memorized for the beginning of the song will be set up on the control panel.



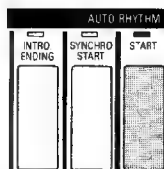
- 2 If you wish, you can now select either the INTRO.COUNT or REPEAT functions.

INTRO.COUNT provides one measure of "metronome" (count-off) before the actual playback of the sequence starts. REPEAT provides a continuous playback of the sequence until stopped.



- 3 Start playback by turning on the auto rhythm.

Adjust the rhythm tempo and press the START switch. Playback will commence.



- 4 You may now play the melody while the lower keyboard chord accompaniment as well as the pedal keyboard bass accompaniment are being played back automatically as programmed.

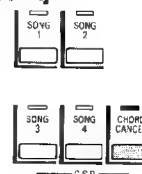
Simply play the melody on the upper keyboard to this accompaniment. The registration will also change automatically as memorized.

When playback has been completed, the auto rhythm will stop (unless REPEAT is on).



- The C.S.P. PLAY button will operate at any time regardless of the position of the Multi Menu. In addition, if you are using the EDIT (or CLEAR/RECORD) function and you press C.S.P. PLAY, those functions will be overridden and playback may commence.

[CHORD CANCEL]



This button cancels the playback of chord and bass accompaniment. In this way you can play the song manually, and use any registration changes programmed in the sequence. You might say that you have "Registration Sequence Programmer" too!

[Memorization and Playback of a Song with TACET]

To accommodate a TACET at the beginning of a piece of music, press the auto rhythm BREAK button, then press CLEAR/RECORD and one of the SONG buttons. Now, press the one measure duration button (without playing a chord on the lower keyboard; the TACET has thus been memorized.) During playback, rhythm and chords will start from the second measure.

- You can also manually change the registration during C.S.P. playback from the control panel without affecting the C.S.P. memory. (When RECORD or EDIT is finished, the registrations stored in the Registration Memory section will automatically be memorized in the C.S.P. memory).
- The memorized data will be retained in the C.S.P. memory for at least one week even if the power is turned off. If you wish to store these sequences for a longer period of time, you can use packs or cassette tapes for this purpose. (See page 28—29 for details.)

3. Recording and Playing Back a Performance



MUSIC PROGRAMMER

This feature allows you to record and play back your chord and melody performances, exactly as you played them!

[Quick Overview of the Operation Procedure]

How to record a Music Program

- 1) Set the control panel or Registration Memory to your desired registration.
IMPORTANT: (Be sure to use Custom Voices on the upper keyboard.)
- 2) Hold the CONFIRM button and the CLEAR button. (The RECORD MELODY, RECORD CHORD and RECORD REGISTER buttons will be automatically illuminated.)

Recording the Chords

- 3) Be sure that the RECORD CHORD button is on.
- 4) Determine how you wish to play the chords. (i.e. press either the FINGERED CHORD or the SINGLE FINGER button).
- 5) Turn on the auto rhythm.
- 6) Play the chords indicated by the music on the lower keyboard.
- 7) When finished, stop the auto rhythm. (This automatically ends the recording of the chords.)
(See page 21 for details regarding Copying Chords from C.S.P.)

Recording the Melody

- 8) Turn on the RECORD MELODY button. (The UPPER CUSTOM button will automatically be turned on.)
- 9) Turn on the PLAY CHORD button.
- 10) Start the auto rhythm. (You will hear the previously recorded chords.)
- 11) Play the melody on the upper keyboard (using Custom Voices).
- 12) When finished, stop the auto rhythm. (This completes your melody recording.)
(If you prefer, you could record a bass accompaniment instead of the melody.)

Memorizing the Registration

- 13) Turn on the RECORD REGIST. button.
- 14) Turn the PLAY MELODY and PLAY CHORD buttons on.
- 15) Start the auto rhythm. (The recorded chords and melody will be played back.)
- 16) While listening to the melody and chords, change the registrations as you like.
It may be more convenient to store previously your registrations in the Registration Memory Section, enabling you to change sounds at the touch of a single button.
- 17) When finished, stop the auto rhythm. (This completes the memorization of the registration changes.)

(Recording of these 3 parts can be done in any order. You can also record more than one part simultaneously.)

How to play back a Music Program

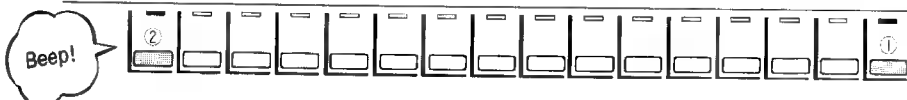
- 1) Turn on the M.P. PLAY button. (All three PLAY buttons will automatically be turned on.)
- 2) If you wish to eliminate any part from playback, simply turn the appropriate PLAY button off. (Of course, you can leave all three buttons on.)
- 3) At this point you may wish to use either INTRO.COUNT or REPEAT. (See page 24 for details.)
- 4) Start playback by turning on the auto rhythm.
- 5) If you wish, you can play any part that is not being played back, while the M.P. will do all the rest.
(If all parts are being played back, you can even play an additional part on the upper keyboard.)

How to record a Music Program (RECORD)

- 1 Set the control panel or Registration Memory buttons to the desired registration.

IMPORTANT: Remember to use CUSTOM VOICES on the upper keyboard.

- 2 Hold the CONFIRM button and press the CLEAR button. You'll hear a beep to verify that the M.P. is ready for you to record.



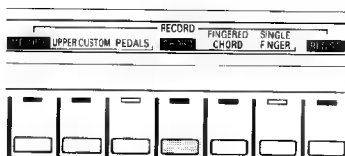
[Recording the Chords]

- 3 Be sure that the RECORD CHORD button is on.

When the CLEAR and CONFIRM buttons are simultaneously pressed, all RECORD buttons are automatically turned on (as shown on the right).

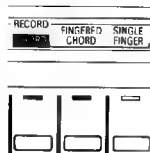
You could now record all three parts (Chord, Melody, Registration) at the same time.

For this example, however, we will record them one at a time, beginning with the chords.



- 4 Determine how you wish to play the chords, (i.e. press either the FINGERED CHORD or the SINGLE FINGER button).

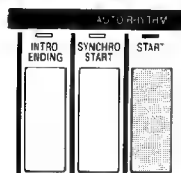
If you have chosen FINGERED CHORD, you can record by playing the chords on the lower keyboard. If you have chosen SINGLE FINGER, you can easily record your chords with one finger! (See page 10.) The buttons in the Auto Bass Chord sections will change according to the feature you selected here.



- 5 Turn on the auto rhythm.

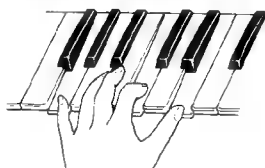
Since the rhythm tempo can be adjusted during playback, you should set it now to a slow comfortable speed to assure the best possible recording.

When you press the START switch, you'll hear one measure of "metronome" before you have to begin to play.



- 6 Play the chords on the lower keyboard according to the music.

As soon as the "metronome" sound stops, the rhythm will start and recording is underway. Therefore, please be ready to play your chords on the lower keyboard (using either the Fingered Chord or the Single Finger method) at that time.



- 7 When finished, stop the auto rhythm.

After you have finished recording your chords, please stop the rhythm. The RECORD CHORD button will be turned off and the chord recording is completed. (All other RECORD buttons are also turned off.)

- The registration set at the beginning of the recording was automatically memorized when the CONFIRM and CLEAR buttons were pressed.

- Chords played while the metronome sound is heard will not be recorded. (The same holds true when recording the melody and registration parts.)

[What to do if you have played a wrong chord]

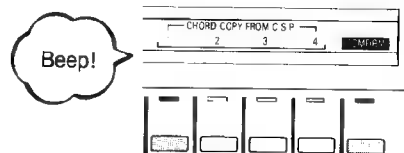
When you have played a wrong Chord, you must re-record the chord part from the beginning.

Turn on the RECORD CHORD button and start the auto rhythm. Then play the proper chord progression. When the RECORD CHORD button is turned on and the auto rhythm is started, all previously recorded chords will be erased, so be careful not to press the Record Chord button unless you intend to record or re-record a performance.

[CHORD COPY FROM C.S.P.]

Instead of recording chords by playing them in tempo on the keyboard, you could memorize them in the C.S.P. and then transfer (COPY) them to the M.P.

- 1) Memorize the chord progression in the C.S.P. (See page 16.)
- 2) Hold the CONFIRM button and press the CLEAR button.
- 3) Hold the CONFIRM button and press one of the buttons numbered 1 to 4.



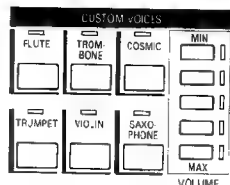
These 4 buttons correspond to the Song buttons (1 to 4) of the C.S.P. Chord Copy from C.S.P. lets you transfer the chord progressions (including repetition symbols) from the C.S.P. to the M.P. (The registrations are not transferred, so be sure that the rhythm is set to the same rhythm used when you stored the progression in the C.S.P.)

- 4) Record a melody and registration by pressing the PLAY CHORD, RECORD MELODY and RECORD REGIST. buttons. Be careful not to press the CLEAR button or the RECORD CHORD button.

[Recording the Melody]

8 Turn on the RECORD MELODY button.

The UPPER CUSTOM button will automatically be turned on with the MELODY button. Since the recorded melody will be played back with a Custom Voice, select a Custom Voice during recording. Be sure to turn on the CUSTOM VOICES button (UPPER) in the Ensemble section.



*
*
*



(These illustrations show the MC-600)

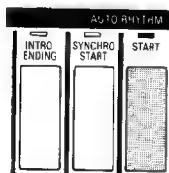
9 Turn on the PLAY CHORD button.

This button allows you to have the Chords played back while you record the melody.



10 Start the auto rhythm.

When you START the auto rhythm, you will hear one measure of "metronome" sound before you have to begin to play. This helps to make sure that you start at the proper time.



11 Play the melody.

As soon as the "metronome" sound stops, the rhythm and chord accompaniment (as well as the bass accompaniment) will start, and you should start playing the melody on the upper keyboard at that time. Please note that you can only record a "monophonic" melody, meaning that only one note at a time should be played.



12 When finished, stop the auto rhythm.

After the chord progression has ended, please stop the rhythm. The RECORD MELODY button will be turned off, and the melody recording is completed.

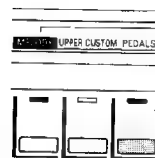
[What to do if you have made a mistake playing the melody...]

Turn on the RECORD MELODY button, start the auto rhythm and play the entire melody again from the beginning. When the RECORD MELODY button is turned on and the auto rhythm is started, the entire previously recorded melody will be erased, so be careful not to press the RECORD MELODY button unless you intend to record or re-record a melody.

[Recording a pedal keyboard performance]

Instead of recording the melody on the upper keyboard, you can record a bass accompaniment played on the pedal keyboard.

- 1) Turn on the RECORD MELODY button and press the PEDALS button.



- 2) Select a pedal voice and adjust its volume to your desired level.
- 3) Turn on the PLAY CHORD button.
- 4) Start the auto rhythm.
- 5) Play the bass accompaniment on the pedal keyboard.

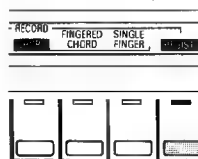


- 6) When finished, stop the auto rhythm.

[Memorizing the Registration]

13 Turn on the RECORD REGIST. button.

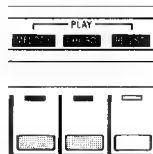
When you manually change the control panel registration in the M.P. mode, that change will be immediately memorized. It is better if you store the registrations you want to use beforehand in the Registration Memory, so that you can easily change them when necessary. (Please be sure to select Custom Voices for the upper keyboard.)



(The illustration shows the MC-600/MC-400.)

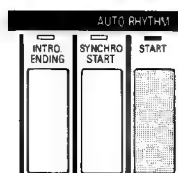
14 Turn on the PLAY MELODY and PLAY CHORD buttons.

This will enable you to change registrations while listening to the recorded chords and melodies as they are played back.

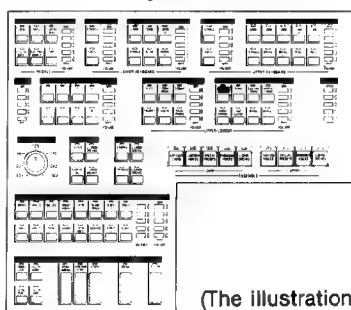


15 Start the auto rhythm.

After one measure of metronome sound, the recorded chord accompaniment (and bass accompaniment) as well as the melody will be played back.



16 While listening to the melody and chords, change the registration wherever you like.



(The illustration shows the MC-600)

The new registrations will be immediately memorized as you change them. And you can change the registrations as often as you like. Registrations can be altered not only by using the Registration Memory, but also by manually changing the buttons and controls on the control panel. You can change voice, volume, effects and all auto rhythm settings.

17 When the song is completed, stop the auto rhythm.

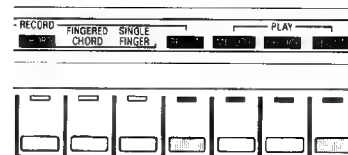
After you have finished memorizing the Registrations, please turn off the rhythm. The RECORD REGIST. button will automatically be turned off and the memorization of the registration changes is completed.

[Editing the Registration]

You can correct parts of the memorized registration as follows.

NOTE: Chord and Melody changes cannot be done using this procedure. Each must be re-recorded in its entirety.

- 1) First press the RECORD REGIST., then the PLAY REGIST.



NOTE: In order to hear the registrations, you must be sure that CHORD PLAY and/or MELODY PLAY is on.

- 2) Start the auto rhythm.
 - 3) Change the registration where desired.
- The new registration will be memorized. Any parts that were not changed, however, will remain as previously memorized.

[M.P. Memory Capacity]

The maximum length of recording depends upon the contents of the performance. In general, your M.P. can store a song of about 3 minutes length. When recording of any part has reached the full capacity of the memory, the RECORD button of that part will start to blink.

- The memorized data will be retained in the M.P. memory for at least one week, even if the power is turned off.
- If you wish to store Music Programs for a longer period of time, you can transfer the memorized data to a cassette tape. (See page 28 for details.)

How to Play back a Music Program (M.P. PLAY)

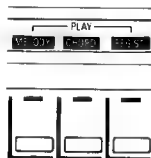
1 Turn on the M.P. PLAY button.

All three PLAY buttons (MELODY, CHORD and REGIST.) are automatically turned on.



2 If you wish to eliminate any part from playback, simply turn the appropriate PLAY button off.

For example, when you want to cancel the melody (or manually played bass accompaniment) during playback, turn off the PLAY MELODY button. Should you wish to cancel the chords during playback, turn the PLAY CHORD button off. If all three buttons are turned on, you will hear all three parts.



3 If you wish, you can now press either the INTRO.COUNT or REPEAT functions.

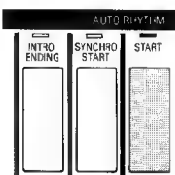
Provides a one measure of "metronome" (count-off) before the actual playback of the Music Program starts. REPEAT provides a continuous playback of the music program until stopped.

Please note that INTRO.COUNT and REPEAT will operate only when all three parts are played back simultaneously.



4 Start the playback by turning on the auto rhythm.

Adjust the rhythm tempo and press the START switch. Playback will start.



5 You may play any part that is not being played back automatically.

For example, if you have cancelled the melody, you may manually play the melody while the chord and bass accompaniment are being automatically played back for you. If you have cancelled chords, you can play the chords while the melody is being played back. Even if the MELODY is being played back, you can play an additional part on the upper keyboard as long as you select a voice section other than Custom Voices. (i.e. COMBINATION/ORCHESTRA.)

When playback is completed, stop the auto rhythm.



- When you wish to use other panels of the Multi Menu as well as the M.P. PLAY, turn on the M.P. PLAY button. The M.P. PLAY button will operate regardless of the position of Multi Menu display.

- When playing back the melody, be sure to select Custom Voices for the upper keyboard.

- When you select all three PLAY buttons (MELODY, CHORD and REGIST.), the M.P. PLAY button will automatically be illuminated.

- Chords (chord and bass accompaniment) will be played back in the same Auto Bass Chord mode (SINGLE FINGER or FINGERED) that was used during recording. If a PEDALS bass accompaniment has been recorded instead of the melody, the bass accompaniment recorded on the pedal keyboard will be played back.

[Memorizing and reproducing a song with tacet]

To accommodate a tacet at the beginning of a piece of music, turn on the auto rhythm BREAK button and the REGIST. button at the beginning and memorize the registration. Start chord recording from the second measure. During playback, a one measure tacet is inserted.

4. 28 additional voices can be transferred to the control panel.

VOICE MENU 1	PIPE ORGAN 1	PIPE ORGAN 2	PIPE ORGAN 3	COSMIC BRASS 1	COSMIC BRASS 2	WHISTLE	PAN FLUTE	OBOE	CLARINET	FLÜGEL HORN	HARMONICA	COSMIC 1	COSMIC 2	COSMIC 3	ORIGINAL VOICE	MENU ON
VOICE MENU 2	CELESTA	HARP	MARIMBA	ACOUSTIC GUITAR	ELECTRIC GUITAR	DISTORTION GUITAR	HAWAIIAN GUITAR	STEEL DRUM	TIMPANI	CLAVINET	COSMIC 1	COSMIC 2	CHIMES	WAVE	ORIGINAL VOICE	MENU ON

VOICE MENU 1,2

You can choose your favorites from among these 28 voices and transfer them to the grey buttons on the control panel.

How to Transfer Sounds to the Grey Buttons

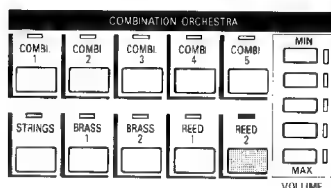
1 Select the Voice Menu panel which has the voice you want to transfer.
Please select either panel 1 or panel 2.

2 Turn on the MENU ON button.

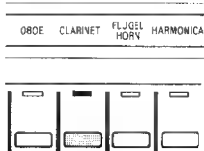
The MENU ON button for the other VOICE MENU panel is also turned on.



3 While holding the button corresponding to the voice you'd like to transfer, press one of the grey buttons to indicate where you want to put that sound.



★
★
★
★



The light above the grey button you just pressed will start to flash, indicating that the sound has been transferred. You can transfer any voice you want to any voice section, so please use the other grey buttons to store various voices in the same way.

[Checking the transferred Voices]

When the MENU ON button is on, and you press a grey button, the voice which has been transferred to that grey button will illuminate. If no voices have lit up on that voice menu, be sure to check the other Voice Menu.

If no voice had been transferred to that grey button, the light corresponding to "ORIGINAL VOICE" will illuminate, meaning that the sound indicated above that grey button has not been changed.

- The Voice Menu voices are suitable for transfer to the following voice sections.

Voice Menu 1	White-lettered	Combination/Orchestra
Voice Menu 2	Orange-lettered	Custom Voices
Voice Menu 2		Special Presets

The 28 voices can all be transferred to any desired voice section. Please note, however, that due to differences in the vibrato effect in combinations other than those mentioned above, some transferred voice will give a somewhat different impression than the original. In such a case, original voice can be obtained by changing the Player Vibrato setting.

- When VOICE MENU settings have been transferred to Custom Voices or to PEDAL, they automatically become "monophonic" voices, meaning that only one note at a time can be played.
- The voices transferred to grey buttons can be memorized in REGISTRATION MEMORY, C.S.P. and M.P.

Cancelling and Recalling Transferred Voices

1 Turn off the MENU ON button.

At this time, the voices transferred to the grey button (in the various voice sections) will be cancelled and these grey buttons will now contain the voices indicated above each of them.



2 Turn on the MENU ON button.

The VOICE MENU sounds that were previously stored in the grey buttons (when you turned off the MENU ON button) have now been recalled.



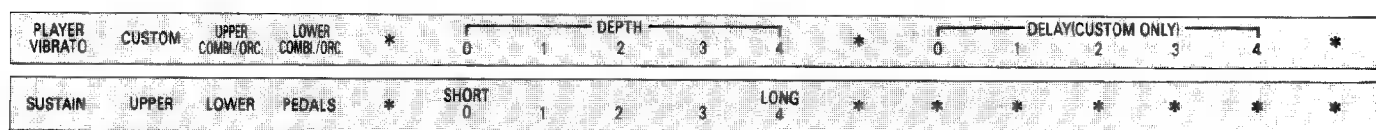
[ORIGINAL VOICE]



By pressing this button, you can cancel the VOICE MENU sounds transferred to the grey buttons, one at a time, thereby returning these grey buttons to the voice indicated on the control panel. To operate, hold the ORIGINAL VOICE button, and press the grey button that you wish to cancel.

- The voices transferred to the grey buttons can be stored for at least a week without being erased even if the power is turned off.

5. You Can Also Memorize Vibrato and Sustain Effects



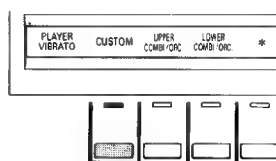
PLAYER VIBRATO/SUSTAIN

On these panels you can memorize the degree/amount of Vibrato and Sustain effects individually for voice sections.

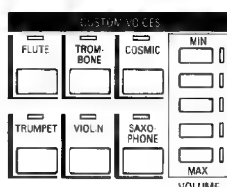
PLAYER VIBRATO

- 1 Press the **CUSTOM** button on the Multi Menu.

Now you can memorize the vibrato effect desired for the Custom Voices.



- 2 Select Custom Voices on the control panel and turn on the **PLAYER VIBRATO CUSTOM** button.

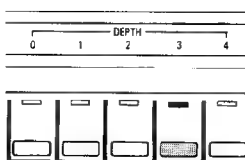


(The illustration shows the MC-600.)

Select a Custom Voice, set the volume and turn on this Voice section in the Ensemble section by pressing the **ENSEMBLE CUSTOM VOICES** button. Be sure to turn on the **CUSTOM** button in the **PLAYER VIBRATO** section (on the right side of the control panel).

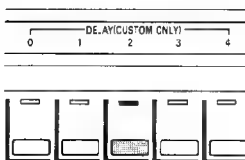
- 3 Set the **DEPTH**.

While actually playing a note, select one of the 5 **DEPTH** degrees. The larger the number, the stronger the vibrato effect obtained. If you choose the 0 button, no vibrato effect will be obtained.



- 4 Set the **DELAY**. (Available only on Custom Voices)

Similarly, you may choose from a total of 5 buttons. The larger the number, the longer it will take for vibrato to be added after pressing a key on the upper or lower keyboard.



Controlled by the **DELAY** buttons



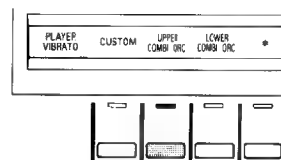
- 5 Turn this **CUSTOM** button on, whenever you wish to add vibrato.

The memorized vibrato settings can be added to the Custom Voices at any time by simply turning this button on.



[Memorizing vibrato for other Voice Sections]

You can also memorize the vibrato setting for the **COMBINATION/ORCHESTRA** voice section for both the upper and lower keyboards.



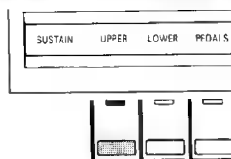
Press the **UPPER COMBI./ORC.** button or the **LOWER COMBI./ORC.** button and proceed in the same way as for Custom Voices. In this way the Vibrato depth will be memorized. The memorized vibrato setting can be recalled at any time by pressing either the **UPPER** or **LOWER** button in the **PLAYER VIBRATO** section (on the right side of the panel).

- A vibrato effect appropriate for each instrument of each Voice section has already been programmed. When you turn **PLAYER VIBRATO** off, you will automatically obtain this pre-programmed vibrato setting.
- Vibrato will not affect **SPECIAL PRESETS**, **ARPEGGIO CHORD** or **PEDAL** Voices.
- The vibrato setting memorized in the **PLAYER VIBRATO** memory will be stored for at least a week without being erased, even if the power is turned off.
- A vibrato setting by Player Vibrato can be memorized into the Registration Memory buttons for easy access.

SUSTAIN

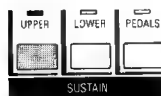
1 Turn the UPPER button on.

First let's turn on the UPPER button and memorize a sustain setting for an upper keyboard voice.

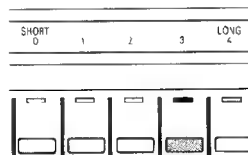
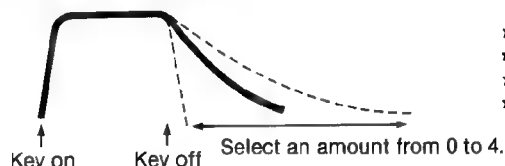


2 Select a voice on the upper keyboard and turn on the UPPER SUSTAIN button.

Be sure that section is turned on in the ENSEMBLE section. The sustain effect can be added to the COMBINATION/ORCHESTRA and SPECIAL PRESETS Sections (and ENSEMBLE VOICES as well for the MC-600).



3 Set the sustain length.



While actually pressing and releasing a note, choose one of these 5 buttons. The larger the number, the longer the sustain effect will be after a Key is released.

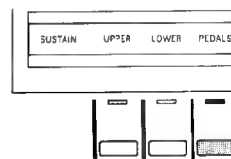
4 Turn the UPPER button on, whenever you wish to add sustain to the upper keyboard.

The memorized sustain settings can be added to the upper keyboard at any time by simply turning this button on.



[Memorizing sustain for the other keyboards]

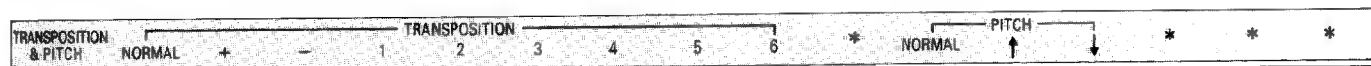
You can also memorize sustain settings for the other keyboards by pressing the appropriate button corresponding to either the Lower or Pedal keyboard and proceed in the same way as described above.



The memorized sustain setting can be recalled at any time by pressing either the LOWER or PEDALS button in the SUSTAIN section (on the right side of the panel).

- Sustain will not affect the Custom Voices.
- The sustain setting memorized in the SUSTAIN memory will be stored for at least a week without being erased, even if the power is turned off.
- A Sustain setting can be memorized into the Registration Memory buttons for easy access.

6. Transposing and Changing Pitch

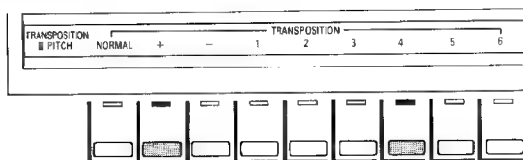


TRANSPOSITION/PITCH

You can change the key of the entire instrument, and fine tune its pitch as well.

TRANSPOSITION

This feature allows you to change the key of the entire instrument in degrees of 1/2 steps. To raise the key, hold the (+) button and press a numeric button. To lower the key, hold the (-) button and press a numeric button. When you want to return to the normal key, simply press the NORMAL button. When power is turned off, the instrument will automatically be returned to normal key.

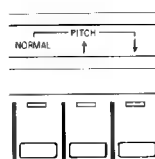


- The Transposition function allows you to move to 12 other keys. (The diagram below shows which note sounds when C is pressed in each case.)

(-)							(+))					
6	5	4	3	2	1	NORMAL	1	2	3	4	5	6
F [#]	G	A [#]	A	B [#]	B	C	C [#]	D	E [#]	E	F [#]	F

PITCH

This feature allows you to fine tune the pitch of the whole instrument. To raise the pitch, press the (↑) button; to lower it, press the (↓) button. The pitch will change slightly every time the button is pressed. When you want to return to normal pitch, simply press the NORMAL button. When power is turned off, the instrument will automatically be returned to normal pitch.



- The (↑) button can be pressed in 16 increments, the (↓) button in 4 increments. (1 step corresponds to about 1.56 cents.) The lamps corresponding to the (↑) button and (↓) button indicate whether the instrument's pitch is currently below or above normal.

7. Transferring Memorized Information to a Pack or Cassette

(The illustration shows the MC-600/MC-400.)



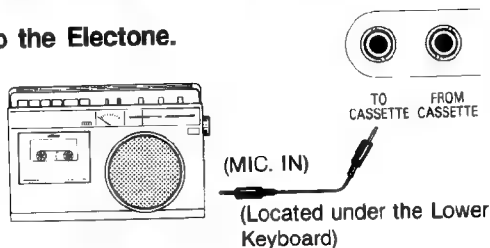
CASSETTE & PACK

The various kinds of data memorized by the Electone can be transferred to either cassette tape or a RAM pack (MC-600/MC-400 only) for long-term storage.

Transferring Data from Electone to Cassette (TO CASSETTE)

1 Connect a cassette recorder to the Electone.

Connect the TO CASSETTE jack on the Electone to the MIC.IN jack (or LINE IN jack) on your cassette recorder with a shielded cable and insert a cassette tape.

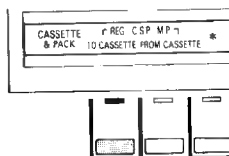


2 Press the RECORD button on the cassette recorder.

If your recorder has a counter, you may wish to note the starting and ending numbers to facilitate later use.

3 Turn the TO CASSETTE button on.

This starts the transfer of the data in the Electone to the cassette tape. During this operation, the TO CASSETTE indicator lamp will stay on. Once this operation is completed, a buzzer will sound, the lamp will flash briefly, then go off.



4 Press the STOP button on the cassette recorder.

[Data that can be saved on cassette tape]

All C.S.P. and M.P. data as well as the data in the Registration Memory can be saved in this manner. In this way, any memory data in Multi Menu including the Voice Menu Voices and the player Vibrato and Sustain effects are saved.

- The save operation takes about one minute.
- You cannot play your Electone during save or load operations. Also, when saving, please note that all indicator lamps on the control panel will go out.
- When the cassette recorder has not been connected properly to the Electone, the TO CASSETTE lamp will stay lit. When this happens, check the connections again and repeat the operation. If this condition still exists, please contact your nearest dealer.
- When using a stereo cassette recorder, set the balance completely to the left.

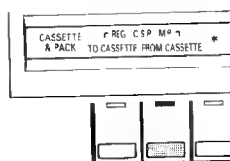
Transferring Data from Cassette to Electone (FROM CASSETTE)

1 Connect a cassette recorder to the Electone.

Connect the FROM CASSETTE jack on the Electone to the HEADPHONES jack (or LINE OUT jack) on your cassette recorder with a shielded cable. Insert the cassette tape on which you have saved the desired data and rewind it up to the point where the saving operation was started.



2 Turn the FROM CASSETTE button on.



3 Press the PLAY button on the cassette recorder.

This starts loading of the data from the cassette tape to the Electone. During this operation, the FROM CASSETTE indicator lamp will stay on. Once this operation is completed, a buzzer will sound, the lamp will flash briefly, then go off.

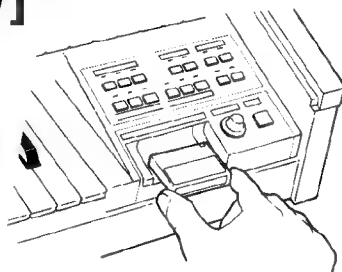
4 Press the STOP button on the cassette recorder.

- The time necessary for the load operation will be the same as it was for the save operation.
- When you load data from a cassette to the Electone, all data previously stored in the Electone will be erased.
- When the volume level (on your recorder) is too high or the data that has been saved is incomplete, a buzzer will sound three times. When the cassette recorder has not been connected properly or the volume level is too low, the FROM CASSETTE lamp will stay lit. In either case, please repeat this procedure and, if this condition still exists, please contact your nearest dealer.
- The cassette recorder to be used must have following specifications:
MIC IN: Input impedance 10K ohms or more
 Minimum input level approx. 10 mV.
HEADPHONES: Output impedance 10 ohms or less Output level 2.5 V or more.

Transferring Data from Electone to Pack (TO PACK) [MC-600/MC-400 only]

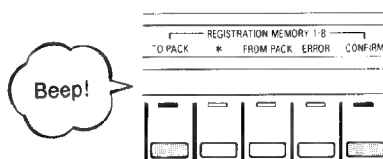
1 Insert the pack.

As shown in the illustration, firmly insert a pack (RP-1) with the labeled surface facing upward.



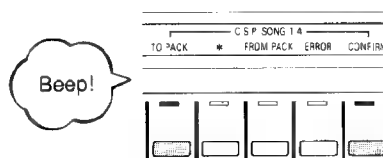
2 To transfer registration information, press the TO PACK button while holding the CONFIRM button.

The TO PACK button will start to flash, indicating that the data stored in the Registration memory has been saved to the pack.



3 To transfer C.S.P. information, press the TO PACK button while holding the CONFIRM button.

The TO PACK button will start to flash, indicating that the data stored in the C.S.P. Memory (up to four songs) has been saved to the pack.



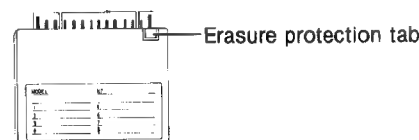
4 Remove the pack.

- Any memory data in Multi Menu relating to the Voice Menu voices, the Player Vibrato and the Sustain effects can also be saved with this method.

- When saving data to a pack, any previous data stored in that pack will be erased.

- When the pack has been incorrectly inserted, or when the data has not been saved properly, a buzzer will sound three times and the ERROR indicator lamp will start to flash.

- When you want to protect data saved in a pack from being erased, please break out the erasure protection tab on the pack. If this tab is broken out, the contents of the pack can not be changed, even when the TO PACK button is pressed. This will make sure that you do not erase any valuable data by mistake.

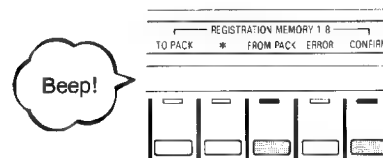


Transferring Data from Pack to Electone (FROM PACK) [MC-600/MC-400 only]

1 Insert the pack.

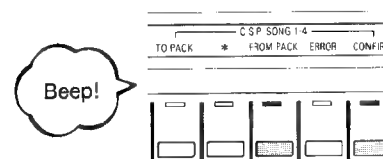
2 To transfer registration, press the FROM PACK button while holding the CONFIRM button.

The FROM PACK button will start to flash, indicating that the registration memory data stored in the pack have been loaded to the Electone.



3 To transfer C.S.P. information, press the FROM PACK button while holding the CONFIRM button.

The FROM PACK button will start to flash, indicating that the C.S.P. Memory data (four songs) has been loaded from the pack to the Electone.



4 Remove the pack.

- It is also possible to save either Registration Memory data only or C.S.P. data only.

- When data is loaded, any data stored previously in the Electone will be erased.

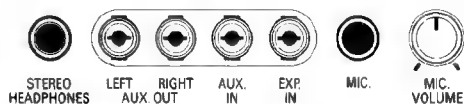
- When the pack has been incorrectly inserted or when the data in the pack is incomplete, a buzzer will sound three times and the ERROR indicator lamp will start to flash.

- To create your own library of Registrations and Chord Sequence Programs, additional RP-1 packs are available for purchase at authorized Yamaha Electone dealers.

- Data stored on cassette tape or packs contain model identification information. This information prevents the transfer of data between different models.

III. USEFUL INFORMATION

ACCESSORY JACKS



■ STEREO HEADPHONES Jack (MC-600)

■ HEADPHONES Jack (MC-400/MC-200)

This jack is to be used to connect headphones (optional). When headphones are connected, there will be no sound from the Electone's speakers. This allows you to play your Electone at any time without disturbing others.

IMPORTANT: Do not use this jack for any purpose other than headphones!

■ AUX. OUT LEFT- RIGHT Jacks (MC-600)

■ AUX. OUT Jack (MC- 400/MC-200)

These jack(s) have been provided to permit the connection of your Electone to most stereo tape recorders that have "Line In" jack(s). This allows direct recording without any outside noise.

Utilize the LEFT jack when recording in the monaural mode. (MC-600)

■ AUX. IN Jack

The "AUX IN" jack can be used to connect most tape recorder/players having a "Line Out" jack. This permits you to play back recordings through the Electone's speaker system. By using this jack, you can also play along with previously recorded music.

■ EXP. IN Jack

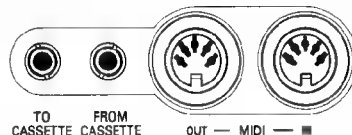
This jack accepts a monaural signal from a synthesizer or similar accessory. The volume of the equipment connected here will be controlled by the Electone Expression Pedal.

■ MIC. jack

For microphone connections. Use this jack when you wish to monitor your own singing or a master of ceremony's commentary from the built-in speaker.

■ MIC. VOLUME

This knob is used to control the volume of a connected microphone. The volume goes up when you turn the knob to the right. Set the volume desired.



■ MIDI IN/OUT Jacks (MC-600/MC-400)

The MIDI (Musical Instrument Digital Interface) terminals conform to the MIDI standard for digital electronic instruments. These jacks enable you to connect your Electone to a computer or other MIDI compatible electronic instruments for data communication.

■ CASSETTE Jacks

These jacks are used to connect the Electone to cassette recorders for data transmission/reception. (see page 28 for details.)

WARNING: The connection or disconnection of any accessory, (other than headphones) while the Electone is ON, can result in extensive damage to the Electone and/or the accessory.

Damage caused by the improper connection/disconnection of accessories is not covered by the manufacturer's warranty.

ELECTROMAGNETIC INTERFERENCE

"Interference" can be a two way street; something you are operating can interfere with others or, something someone else has may interfere with something of yours.

Naturally, it is also possible that two or more of your own electronic (electric) devices may interfere with each other. Your Electone has been designed to minimize all these possibilities and meets all applicable standards worldwide.

Electromagnetic interference with your Electone can show itself in a variety of ways. You may hear speech, music, "beeps", static, or a buzzing sounds. Yamaha Electones are designed to reject RF (radio frequency) signals that are many times the levels found in any normal environment. If, however, you are in the immediate proximity of a very high power transmitter, some interference may still occur. If this should happen, please try to identify the radio (TV) station and record the time of day that the interference occurs. Station identification is essential in order that the offending frequencies can be established and the authorized (legal) operating power level of the transmitter causing the interference can be verified. If the interference continues, please follow the corrective measure suggestions provided later in this section.

If the interference is in the form of occasional buzzing or static, it is highly probable that the cause can be traced to the turning on or off of some household appliance. The offending appliance can also be outside your own residence. Usually a "time" pattern (i.e., evenings only, etc.) will be involved. Noises of this type rarely originate in the Electone itself. If the condition continues, please contact your local authorized Yamaha Electone dealer for assistance.

Main power line disturbances and electrical storms (lightning) can also be the source of static interference. Generally speaking, problems generated by these two sources will also be present in your other audio or video equipment. Lightning can also be very destructive. The following special warning also applies to virtually all electronic products.

IMPORTANT NOTICE

Modern electronic products, (i.e., computers, video games, electronic organs, etc.), contain components that, under normal conditions, extend the service free life of the products they make up an almost unbelievable period of time. This is especially true when you consider the vast number of equivalent components incorporated within one given part. These "parts," called "integrated circuits," are however, subject to destruction by high voltage discharges, such as a close proximity lightning strike. This can occur even if the unit is turned off.

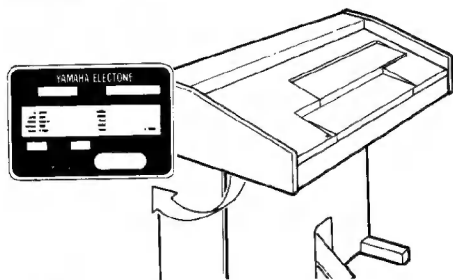
IN PERIODS OF ELECTRICAL STORM PROBABILITY, IT IS ADVISABLE THAT YOU DISCONNECT ANY ELECTRONIC DEVICE NOT ACTUALLY IN USE, FROM ITS WALL SOCKET.

INSTALLATION AND MAINTENANCE

Your new Electone does not require professional installation or routine maintenance. However, it is IMPORTANT that you be aware of the following:

■ INSTALLATION

1. **WARNING:** Do not allow your Electone or its bench to rest on or be installed over power cords of any type. An electrical shock and/or fire hazard could possibly result from this type of improper installation.
2. **WARNING:** Do not place objects on your Electone power cord or place it in a position where anyone could trip over, walk on or roll anything over it. An improper installation of this type creates a personal injury/fire hazard possibility.
3. **Main Power Supply Verification:** Your Electone has been manufactured specifically for the main supply voltages used in your area. If you should move, or if any doubt exists, please consult your local authorized Electone dealer for instructions. The main supply voltage is printed on the name plate.



4. **Environment:** Your Electone should not be installed in a position that exposes the cabinet to direct sunlight or air currents having high humidity or heat levels. This type of installation can cause contact oxidation, case joint separation, and cabinet finish problems.
5. **Vinyl Products:** Do not set vinyl items, (i.e., headphones, vinyl doilies, etc.) on the finished surfaces of your Electone or use a polyvinyl material to cover the unit for any extended period of time. A chemical reaction may occur between the finish chemical and those contained in the polyvinyl products resulting in a permanent marring of the finish.
6. **Top Cover (MC-600):** The top cover was not designed to support decorative items, nor to withstand substantial pressure. Do not permit anyone to sit, lean or climb on this assembly.
7. **Electromagnetic Interference (RFI):** Your Electone has been type tested and found to comply with all applicable regulations. However, if it is installed in the immediate proximity of other electronic devices, some form of interference may occur.

■ MAINTENANCE

1. **SERVICE:** Your Electone contains no user serviceable components. Refer all service to qualified service technicians only.
2. **BENCH STRUCTURAL INTEGRITY:** If any motion or an "unsteady" sensation is noted in the bench, please check its structural integrity immediately. Discontinue use until any and all discrepancies are resolved. The bench was designed for seating only. No other applications are recommended.
3. **POWER:** When not in use, always turn your Electone "OFF".
4. **CLEANING/CARE**
 - A) **GENERAL:** DO NOT use chemically harsh (i.e., alcohol, paint thinners, etc.) or abrasive cleaners on any portion of your Electone.
 - B) **KEYS/CONTROL PANEL:** When cleaning the keys and control panels of your Electone please use a soft absorbent-type cloth that has been dampened with a very mild solution of liquid soap and lukewarm water.
 - C) **CABINET/BENCH:** Clean the cabinet portions of your Electone with a slightly dampened cloth containing a neutral cleaning agent. The cleaning agent selected should not contain a high wax content or any other substance that would have a tendency to form a "build-up" on the cabinet.

IMPORTANT NOTICE: This product has been tested and approved by independent safety testing laboratories in order that you may be sure that when it is properly installed and used in its normal and customary manner, all foreseeable risks have been eliminated. DO NOT modify this unit or commission others to do so unless specifically authorized by the manufacturer. Product performance and/or safety standards may be diminished. Claims filed under the expressed warranty terms may be denied if the unit is/has been modified. The warranty of title (patent infringement, etc.) will not be defended by the manufacturer in the area(s) that relate to the modification. Implied warranties may also be affected.

TROUBLE SHOOTING

Phenomenon	Cause and Solution
Only one sound is heard when two notes are played on either the pedal keyboard, or when Custom Voices are used by themselves.	For practical performance reasons, this Electone has been designed so that only one note can be played at a time on the pedal keyboard or with the Custom Voices. (See page 2.)
Even though a voice has been selected for upper/lower keyboard, and its respective volume has been set, the selected sounds are not produced.	The corresponding button in the Ensemble section is off. Select the appropriate control. (See pages 3 to 5.)
The Arpeggio Chord feature does not seem to work.	The Arpeggio Chord function is synchronized with, and controlled by, the Auto Rhythm section, and therefore, must be "on" for this feature to operate. (See page 6.)
Although the SUSTAIN or PLAYER VIBRATO button is on, no effect is obtained.	The Sustain and Player Vibrato settings must first be memorized in the appropriate section of the Multi Menu. (See pages 26–27.)
When you lift your hand off the lower keyboard and no pedals are being played, the rhythm, lower keyboard and pedal sounds stop.	When the Synchro Start function is used, the rhythm stops when both the lower keyboard and the pedal keyboard are not being played. If you want the sounds to continue, turn on the Auto Bass Chord MEMORY feature. (See page 10.)
When using the Single Finger function, the chord does not change even when you press different keys.	When the lower keyboard is played legato style, the chords may not change properly even though you are pressing different keys. You must lift your fingers completely from the keyboard when changing chords. (See page 10.)
No harmony sounds are heard even though the Melody On Chord section is turned on.	When using Melody On Chord, the harmony sounds are provided by the COMBINATION/ORCHESTRA section of the upper keyboard. (On the MC-600, ENSEMBLE VOICES can also be used). You must select a voice in this section, adjust the volume, and turn that section "on" in the Ensemble section (See page 12.)
Some functions cannot be memorized in the Registration Memory.	The following functions cannot be memorized: Auto Rhythm Start, Synchro Start, Intro/Ending, Break, Fill In, Master Volume, Expression Pedal. (See page 13.)
Some functions are not memorized as a part of C.S.P. and M.P. registrations.	The following functions cannot be memorized: Auto Rhythm Tempo, Start, Synchro Start, Foot Switch, Auto Bass Chord, Master Volume, Expression Pedal. (See pages 16, 23.)
C.S.P. CLEAR/RECORD cannot be turned on. M.P. RECORD cannot be turned on.	C.S.P. or M.P. are in the PLAY mode. When memorizing data in C.S.P. or M.P., these buttons must be turned off. (See page 16.)
Chords are not memorized in the C.S.P.	The Duration button was pressed after you lifted your fingers off the lower keyboard. To enter chord data into the C.S.P., you must press the Duration button while holding a chord. (See page 16.)
During C.S.P. editing, the data you want to insert is not memorized in the desired position.	When inserting data, always press the INSERT button at the data pointer position where you want to add data. (See page 18.)
When the INSERT button is pressed during C.S.P. editing, the warning buzzer sounds.	This happens when the C.S.P. is memory full. If you still want to insert data, you must make room for it by first deleting some of the existing data. (See page 18.)
The melody is not played back the way it was performed with M.P., or it is not played back at all with M.P.	The Music Programmer utilized Custom Voices for the recorded melody. Custom Voices are "monophonic" (only one note can be played at a time). When more than one key is pressed, only the highest note will sound. If no melody is heard at all, check to be sure that the Custom Voices are turned on (for the Upper keyboard) in the Ensemble section. Adjust the volume to your desired level as well. (See page 22.)
When M.P. is being played back, the Auto Bass Chord button cannot be changed.	When M.P. is being played back, the Auto Bass Chord mode will always be the same as it was during recording. It is therefore not possible to change modes or turn them off. (See page 24.)
When M.P. is being played back, the rhythm does not stop even after chords and melody have ceased playing.	This can occur if, when recording registration changes, you do not stop the Rhythm promptly at the end of the song. (See page 23.)

SPECIFICATIONS

*Specifications subject to change without notice.

		MC-600	MC-400	MC-200
KEYBOARD		UPPER: 44KEYS (f ~ c4), LOWER: 44KEYS (F ~ c3), PEDALS: 13KEYS (C ~ c)		
COMBINATION/ ORCHESTRA	UPPER	COMBI. 1-2-3-4-5, STRINGS, BRASS 1-2, REED 1-2, VOLUME	COMBI. 1-2-3-4, STRINGS, BRASS 1-2, REED, VOLUME	COMBI. 1-2-3, STRINGS, BRASS 1-2, VOLUME
	LOWER	COMBI. 1-2-3, STRINGS, BRASS 1-2, VOLUME		COMBI. 1-2, STRINGS, BRASS, VOLUME
ENSEMBLE VOICES	UPPER	STRINGS, VOCAL, VOLUME		
	LOWER	STRINGS, VOCAL, VOLUME		
SPECIAL PRESETS	UPPER/ LOWER	PIANO, ELECTRIC PIANO, HARPSICHORD, VIBRAPHONE, JAZZ GUITAR, BRASS, BANJO, PHASER, VOLUME	PIANO, ELECTRIC PIANO, HARPSICHORD, VIBRAPHONE, JAZZ GUITAR, BANJO, VOLUME	FLUTE, TROMBONE, TRUMPET, SAXOPHONE, PIANO, VIBRAPHONE, JAZZ GUITAR, HARPSICHORD, VOLUME
CUSTOM VOICES	UPPER/ LOWER	FLUTE, TROMBONE, COSMIC, TRUMPET, VIOLIN, SAXOPHONE, VOLUME	FLUTE, TROMBONE, TRUMPET, SAXOPHONE, VOLUME	
ARPEGGIO CHORD	LOWER	1-2-3-4-5-6-7-8, VOLUME	1-2-3 4-5-6, VOLUME	1-2-3-4, VOLUME
ENSEMBLE	UPPER	COMBI. ORCHES., ENSEMBLE VOICES, SPECIAL PRESETS, CUSTOM VOICES	COMBI. ORCHES., SPECIAL PRESETS, CUSTOM VOICES	COMBI. ORCHES., CUSTOM SPECIAL
	LOWER	COMBI. ORCHES., ENSEMBLE VOICES, SPECIAL PRESETS, CUSTOM VOICES, ARPEGGIO CHORD	COMBI. ORCHES., SPECIAL PRESETS, CUSTOM VOICES, ARPEGGIO CHORD	COMBI. ORCHES., CUSTOM SPECIAL, ARPEGGIO CHORD
CUSTOM VOICES	PEDALS	BASS 1-2, CONTRA BASS, ELECTRIC BASS 1-2, TUBA, VOLUME	BASS 1-2, ELECTRIC BASS, CONTRA BASS, VOLUME	
EFFECTS	TREMOLO SYMPHONIC	TREMOLO=CHORUS, TREMOLO, UPPER COMBI. ORCHES., LOWER COMBI. ORCHES., SYMPHONIC=CELESTE, SYMPHONIC, UPPER COMBI. ORCHES., LOWER COMBI. ORCHES.	TREMOLO/SYMPHONIC=TREMOLO, SYMPHONIC, UPPER COMBI. ORCHES., LOWER COMBI. ORCHES.	
	REVERB	REVERB		
	PLAYER VIBRATO	CUSTOM, UPPER, LOWER		
	SUSTAIN	UPPER, LOWER, PEDALS		
AUTO RHYTHM	PATTERNS	MARCH, TANGO, WALTZ 1-2, BALLAD, SWING, BOSSANOVA, SAMBA, LATIN, LATIN ROCK, SLOW ROCK, BOUNCE, 8 BEAT 1-2, DISCO, 16 BEAT		
	CONTROLS	TEMPO, TEMPO LAMP, BALANCE (MC-600-MC-400), VOLUME, START, SYNCHRO START, INTRO. ENDING, BREAK, FILL IN, ENDING VARI., EXTRA PERCUSSION, FILL IN MODE, FILL IN VARI.		
	FOOT SWITCH	RHYTHM FILL IN, RHYTHM BREAK, RHYTHM STOP, (ENDING)		
AUTO BASS CHORD		SINGLE FINGER, FINGERED CHORD, CUSTOM A.B.C., MEMORY		
MELODY ON CHORD		1-2		
REGISTRATION MEMORY		1-2-3-4-5-6-7-8, CANCEL, MEMORY	1-2-3-4-5-6, CANCEL, MEMORY	
C.S.P. & M.P.		C.S.P. PLAY, M.P. PLAY, INTRO. COUNT, REPEAT, C.S.P.=SONG 1-2-3-4, CHORD CANCEL		
MULTI MENU	REGISTRATION MENU	1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16		
	C.S.P.	CLEAR/RECORD, EDIT, $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$, $\frac{1}{16}$, $\frac{1}{32}$, $\frac{1}{64}$, $\frac{1}{128}$, $\frac{1}{256}$, $\frac{1}{512}$, $\frac{1}{1024}$, $\frac{1}{2048}$, $\frac{1}{4096}$, $\frac{1}{8192}$, $\frac{1}{16384}$, $\frac{1}{32768}$, $\frac{1}{65536}$, $\frac{1}{131072}$, $\frac{1}{262144}$, $\frac{1}{524288}$, $\frac{1}{1048576}$, $\frac{1}{2097152}$, $\frac{1}{4194304}$, $\frac{1}{8388608}$, $\frac{1}{16777216}$, $\frac{1}{33554432}$, $\frac{1}{67108864}$, $\frac{1}{134217728}$, $\frac{1}{268435456}$, $\frac{1}{536870912}$, $\frac{1}{1073741824}$, $\frac{1}{2147483648}$, $\frac{1}{4294967296}$, $\frac{1}{8589934592}$, $\frac{1}{17179869184}$, $\frac{1}{34359738368}$, $\frac{1}{68719476736}$, $\frac{1}{137438953472}$, $\frac{1}{274877906944}$, $\frac{1}{549755813888}$, $\frac{1}{1099511627776}$, $\frac{1}{2199023255552}$, $\frac{1}{4398046511104}$, $\frac{1}{8796093022208}$, $\frac{1}{17592186044416}$, $\frac{1}{35184372088832}$, 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